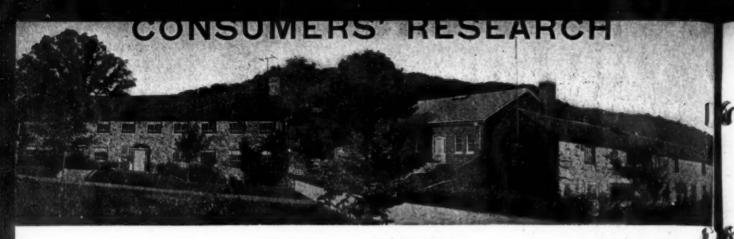
SUMERS' RESEARCH

Bulletin



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Vol. 16 . No. 6

BULLETIN

December 1945

Off the Editor's Chest

ATCHFUL WAITING in the matter of major purchases will be a wise policy for the thrifty consumer, probably for the next eight to twelve months. Pressure saucepans, electric toasters, electric mixers, vacuum cleaners, washing machines and ironers, even an occasional radio set and electric refrigerator are to be seen in the shops. Most of these are not for sale but are just "demonstration samples," on which orders are being taken for future delivery. In some cases delivery is promised in thirty to ninety days; in others, no delivery date is given, and prospective purchasers are advised that orders will be filled as merchandise is received, according to the date on which they were placed by consumers.

New brand names are making their appearance. Some represent the expansion into new fields of firms well established in other lines or of firms which during the war were making some specialized military product and are now seeking outlets for the peacetime productive activities of their plant and personnel. Some represent a change of name for an old brand which did not have too good a reputation: others represent a change from some specialized field or method of marketing to a different type or grade of retail outlet. In yet other cases, a brand name of an honest and respected product has passed, through sale, bankruptcy, or by other means, into the possession of a manufacturing firm of entirely different ideals of performance and service.

There are many actual newcomers in the manufacture of household appliances, particularly small firms representing new capital and, in many cases, new types of products. A consumer who buys an appliance from a firm that does not have a reasonably assured continuity of product and policy must necessarily run some risk of difficulties in obtaining parts or service at some future date, or he may be actually unable to obtain parts or service for a repair job under any conditions, in the event that the manufacturer discontinues that particular product or class of products, or goes out of business altogether. Cases of that kind have often occurred. Many users of washing machines and refrigerators have had cause to regret purchases of appliances which are now "orphans" (as the trade calls them) and for which parts and servicing are often unobtainable or obtainable with such difficulty and expense that it has been found easier to junk the appliance than to try to keep it in running order.

Another development in the appliance field is the assembling of various items from parts currently available, perhaps in part from repaired or rebuilt units recovered from old or junked equipment. Because of the great demand for home freezer units (which are expected to be in very wide demand in the post-war period), various department stores have had a few freezers made up by local refrigeration service companies or reconditioning firms. Prices of these in some cases have been very high. in others have seemed reasonable; such appliances, if conscientiously manufactured and properly serviced after installation, may give good performance and satisfactorily long life. On the other hand, (Continued on page 21)

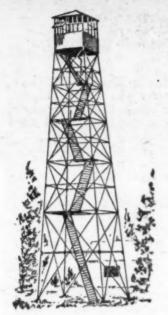
Scientific and Technical Experts and Editors: F. J. Schlink, R. Joyce, M. C. Phillips, A. R. Greenleaf, and Charles L. Bernier. Editorial Assistant: Mary F. Roberts.

Charles L. Bernier. Editorial Assistant: Mary F. Roberts.

Symbols used to indicate sources of data and bases of ratings: A—recommended on basis of quality; AA—regarded as worthy of highest recommendation; B—intermediate with respect to quality; C—not recommended on basis of quality; cr—information from Consumers' Research's own tests or investigations; 1, 2, 3—relative prices, 1 being low, 3 high. Note that price and quality are completely differentiated in CR's listings; a quality judgment is independent of price; 44, 45—year in which test was made or information obtained or organized by the staff of Consumers' Research. It will be advantageous if you will, whenever possible, send prompt notice of change of address at least a month before it is to take effect, accompanying your notice with statement of your old address with name in full. At least three weeks' notice must be given in any case. This rule, however, regarding long advance notice does not apply to military personnel.

**CR will, of course, gladly change addresses for men and women in the services as often as required by changes in station and other circumstances.

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The Consumers' Observation Post

CHRISTMAS CARDS AND GAY WRAPPING PAPERS are expected to be plentiful this year. The Post Office warns, however, that fancy greeting cards decorated with tiny particles of glass, metal, mica, sand, and similar substances must be mailed in sealed envelopes (with first-class postage) so that there is no danger the substances will shake out and be a potential hazard to the workers sorting mail.

CAROTENE, the substance which is converted into

vitamin A in the body, is abundantly found in carrots. The amount, however, varies with the age of the carrot, according to recent reports from the Rhode Island and the Arizona Experiment Stations. Very young and too old carrots were found to contain less carotene than those in their prime. For highest vitamin value, avoid the baby carrots, which may be delicate in flavor and texture, but lacking in carotene.

WHITE SHIRTS and other white cotton garments that have been scorched in ironing can be restored to their original life and whiteness by dampening the scorched area with water and giving it ten minutes' exposure at five inches to the ultraviolet rays of a sun lamp. At least that is what the engineers of the Westinghouse Lamp Division claim. The editors of Rayon Textile Monthly in which the experiment was reported, however, expressed scepticism regarding the ability of the treatment to restore the fabric to its original tensile strength, as suggested.

WITH A SURPLUS OF POTATOES this year, the top grades are going to feed cattle, while the lowest grades or culls are going to consumers. That, reports The Wall Street Journal, is one result of the government's price-support policy. The government buys the two top grades at market prices and sells them at a loss for feed and for making starch and alcohol. Since the government won't take the culls, the farmers send them to market. Yet there are still people who believe that government planning or a "managed economy" is something we should have more of.

* * *

SHOES are not plentiful, in spite of their recent removal from rationing. Leather for certain types of women's shoes is scarce and factories report difficulty in getting more experienced help. Stocks of children's shoes are very low but the situation is expected to improve with the diversion of Army retan leather no longer needed for service shoes. For men's shoes the outlook is reported to be much better, and optimistic predictions are that low and medium could be served as a shoet March 1946, top quality by quality shoes will be at pre-war levels about March 1946, top quality by June 1946.

FIRST A REFRIGERATOR, next a washing machine, then an automobile, is the order in which Philadelphia consumers plan to make their purchases when such items are again available, according to a survey by the Philadelphia Evening Bulletin. Care of perishable food and clean clothes apparently are of primary importance in American living standards.

CONSERVATION OF CLOTHING, particularly in the men's wear field, is still necessary. The trade sees little prospect of a marked increase in the production of high-quality socks before next summer, reports the Daily News Record.

Wool clothing is not expected to be plentiful before spring. The present shortage of men's clothing is so serious that a Browning King store in Providence, R. I., issued an announcement in the latter part of October that until further notice the store would be open only from noon to 5:30.

THE NUTRITIONAL VALUES OF MANY FOODS have deteriorated as a result of the influences of modern civilization, is the conclusion reached by the Council on Foods and Nutrition of the American Medical Association in a recent statement of policy. The Council pointed out that the current growing practices tend to produce fruits and vegetables that give better yields per acre and to have better appearance or better keeping quality in the market rather than those which give the highest vitamin and mineral content. The result is that the consumption of natural foods does not always insure adequate nutrition.

NYLON HOSE for women, when it makes its long awaited appearance, may not at first be up to pre-war quality. One woman's page writer reports that first supplies will be mixed with other fibers to make the nylon go farther. Only later, she points out, will nylon be nylon. She recommends sticking to rayons, plain knit and mesh, for a time.

WARTIME BARBED WIRE FENCING that was required to be made with only a very small weight of galvanized coating is likely to be completely covered with rust in three years. Farmers are advised not to buy surplus war stocks of such wire. Recent experiments at Cornell University with exposure tests over a period of six years showed that the samples with 0.25 to 0.27 ounce of galvanizing (zinc coating) per square foot of wire surface were nearly completely covered with rust. It is estimated that the fencing made during wartime has a considerable lighter coating than the lightest of the tested samples. At the other extreme, test samples with an 0.30-ounce-per-square-foot coating were only 15 percent rusty after six years' exposure.

MINERAL OIL was found to have been substituted for rationed corn, cotton-seed, soya bean, and other vegetable oils in violation of the California Food and Drugs law. The California Bureau of Food and Drugs discovered in one city a creamery and three restaurants using mineral oil, which is a laxative, in mayonnaise, salad dressing, and popcorn; in another city, a manufacturer was distributing to restaurants a mayonnaise made with mineral oil. In still a third case, 147 50-gallon drums of mineral oil artificially colored and labeled as soya bean oil were seized which had been sold to a processor of popcorn. Consumers who are not in the habit of taking their laxatives disguised as salad dressing and "buttered" popcorn will do well to give up these two items for the time being unless they can be sure of what they are getting.

THE VEGETARIAN DIET on which the greater part of the population of India subsist is in large measure responsible for the faults of inefficiency and laziness attributed to the Indian worker, suggests a review in Nutritional Observatory of a recent book by M. R. Masani concerning the food problems of that country. Rice and wheat are the chief articles of diet. Flesh foods are little used, partly on religious grounds and partly because the yield from an acre of ground is greater when planted in grains than if it is used to raise livestock. Evidence continues to pile up to show that efficiency and high productivity require a high protein (meat-eggs-milk-fish) diet.

THE AMERICAN AUTOMOBILE of the future will have an air-conditioning system, providing for cool air in summer and warm air in winter, predicts a Packard Motor Car Company executive. Cooling systems available in pre-war Packards were in considerable demand in the South, particularly in Texas. In the Packard, the compressor unit was under the hood, and operated off the same drive as the fan belt. The equipment used up much of the space in the luggage compartment. Some Cadillac cars are reported to have had a similar air cooling equipment, that sold for something over \$400.

STREAMLINING REFRIGERATORS does not make as great an impression on house—wives as the sales and design departments of appliance manufacturers would have (The continuation of this rection is on page 29)

Your 1946 Car

The First of a Series of Articles on the New Cars

NE of the biggest jobs of the automobile industry in the early post-war period appears to be that of overcoming the idea fostered during the war by advertising men and radio commentators, that new and radical improvements in automobiles are to be expected in the cars produced in the coming year or within the next year or two. It is, however, understood generally throughout the automotive industry that the first offerings of cars for the 1946 season will look and be, in their chief characteristics, much like the last of the 1942 cars produced just before production was put under drastic governmental restrictions on January 2, 1942. The public, however, is skeptical, and a certain amount of sales resistance has been built up against the 1946 cars on account of the belief of many consumers that buying a new car might be a bad investment unless a family's needs make the purchase essential, because of the possibility of the cars' being outmoded in one or two years by radical changes allegedly on the point of being put into production by the big manufacturers. Actually some 1946 cars will be different in significant respects. To assume otherwise would be to conclude merely that none of the progress made in automotive design and manufacture during a fouryear war period is being translated into actuality, at least the actuality of your 1946 car.

This period, during which automobiles have not been pro-

duced for the consumer market, has given the industry an unprecedented opportunity to study the four-year service record of the latest models which they marketed. This is a very different situation from that normally obtaining, for in normal times changes in details between models were so extensive that often the "bugs" which developed in a given car would not be corrected, since the design of the next year's model was complete and being tooled up for production by the time last year's model had begun to show its defects. Thus in some cases, faults in design and workmanship were not corrected either in the next year's model or even in the model of the year following.

Even with full recognition of the rapid pace of work in the automotive industry, too little time has elapsed since V-J Day for an industry to convert from virtually complete military activity to the production of automobiles for civilians. It was some weeks after the end of the war before some restrictions on civilian production were removed: others still remain at this writing. It is quite likely too that many restrictions will continue to remain for months to come, especially on certain materials which were critically short during the war and will not be available in adequate quantities until our imports from foreign sources can be increased materially. It must be remembered that these same materials were just as critical, even more, during the entire

war period; yet the condition did not greatly hamper war production, nor seriously affect the quality of war materiel which the industry produced.

The "why" of this is important to the 1946 car buyer, although perhaps not directly evident. It means in general that your 1946 car will not use the same materials as were utilized in producing your 1942 car, but then your 1947 or 1948 car will not either. Furthermore, it means that our ideas of what constitutes the technical features of a good automobile will have to be revised in the light of what has been learned during the war.

In Special Bulletin 29 issued by Consumers' Research in February 1942, some of the changes or rather "substitutions" in materials used by automobile manufacturers, and the effects of these substitutions on car design, as forced upon the industry even before production stopped, were presented. Many of these were just what the word "substitute" implies. On the other hand still other materials were more costly than the original ones and would be more properly called "alternates" rather than substitutes. For a time the German word "ersatz" threatened to come into the automotive (and civilian) vocabulary, but its use soon disappeared as the industry went to work in earnest.

The NE Steels

When it was realized that certain alloying materials used in the wide variety of alloy

steels needed in automobile manufacture would remain critically scarce for years to come, the automotive industry in cooperation with the steel industry developed an entirely new series of steels-known as the "NE" (National Emergency) steels. The development, acceptance, and specification of these steels represents one of the achievements of the metallurgists in World War II. The work was accomplished in a matter of weeks, rather than the many months that would normally be required. More than this, the steels which they listed have proved so acceptable that many have already become permanent materials of industry. Early this year (1945) some 9 of the NE steels had been accepted as regular SAE steels, and about 30 others are considered "regular" by the steel industry, out of a total in the NE list of more than 70. At this time (1945) the total number of steels in the SAE list is approximately 90.

Since the method used in developing the NE steels was in general to reduce the percentages of critical alloying elements while increasing the amounts of elements that are more abundant (but less "spectacular" from the sales standpoint), we can expect that some of the steels in 1946 and later cars will be of the NE type; yet they will be better, or at least as good as those of the past.

Other Metals

What has just been noted briefly about steels also took place with other metals. Silver, for instance, was the alternate for tin in solders used in car manufacture (bodies, ignition wiring, etc.). (Tin is still a "tight" metal and continues to be restricted at this time.) Re-

strictions on nickel and chromium for plating apparently will be withdrawn and these metals available in sufficient quantities for the first 1946 cars to appear on the market. Cadmium and zinc, while fairly abundant, may be somewhat limited, but these metals are not too troublesome a matter in their effect on immediate production.

Non-Metallic Materials

Preliminary information concerning the details of 1946 cars leads to the conclusion that non-metallic materials, plastics especially, will be less used than in 1942. This may be due to the time required to design and produce the necessary plastics, molding dies and equipment, but it is one engineer's belief (and he is not alone in his opinion) that this is by no means the only reason.

During the war, the body stylists have come up with some very fanciful car designs. Some are patterned after the fuselages of airplanes-"greenhouses" and all (meaning tops of transparent plastic). we wonder how comfortable the passengers will be under one of these tops of transparent plastic on a hot summer day. Remember too that most of these plastics transmit ultraviolet light, so that a good suntan will be in order as well-perhaps too good a tan in many cases, or perhaps even a painful case of sunburn. This. however, may be but a minor objection in most localities. The major objection relates to strength plus such consideration of the relative difficulty of servicing, as smoothing out fender dents and creases and eliminating scratches. (All of which is reminiscent of the days, not so many years ago, when metal tops came into being. Remem-

ber when the advertising said "steel alone is not enough" Imeaning a wood frame was necessary under the steel for strength], followed the next year by the same company advertising the "all-steel turret top -body by. . . . " In which case the top was "all-steel" but the body was not-illustrating the big difference between a dash or a comma, and a period.) The steel top does have its value in more ways than one, and many engineers' preferences are for steel tops, at least for a steel frame. However. we do not wish to imply that plastics are undesirable, for where their use will improve vision, and where they provide decorative effects (if car buyers want the interiors of their cars "dolled up") plastics are certainly acceptable.

Aluminum Pistons Come Back

Those manufacturers who were forced to abandon the use of aluminum for pistons of 1942 cars and resorted to cast iron, and in turn modified their engines to compensate for the differences in weight and rate of heat conduction of the two metals, will undoubtedly return to aluminum for 1946 cars. Engine changes for 1946 will thus for most makers be "in reverse" and more in accord with late 1941 or early 1942 models. Ford's 6 and V-8 engines will use aluminum pistons, and abandon the cast alloy steel pistons used for some years previous. There will be 4 instead of 3 rings on Ford pistons, to give equivalent oil economy.

Improved Rustproofing

Possibly as the result of lessons from late model pre-war cars, cars for 1946 will be more effectively rustproofed than in the past. Rapid deterioration of body and door panels, fenders, etc., during the war period has been a noticeable trouble to car owners. Sections of sheet metal parts of cars otherwise in good condition have "rotted out" (usually from the inside toward the outer surface) indicating that while owners took good care of body finish, they were helpless against the more serious deterioration due to corrosion of metal work.

Similar improvement is indicated for the chrome-plated parts, such as bumpers, bumper guards, and rails. Here it is the undercoatings of copper and nickel that provide rust resistance, not the chromium on the surface, which resists wear well, but is of no value as protection against corrosion. Thicker platings as undercoatings beneath the chromium are expected to be used in 1946 models.

Upholstery Fabrics

Shortages of materials suitable for upholstery and trim, unless materially relieved within a few months, will force manufacturers to use only a limited number of types of fabrics, at least in early runs of 1946 models. This appears likely with the pile type fabrics. Bedford Cord will be used, as will a new synthetic fiber material; on this, more information will be given when available. Sufficient rubber will be available to permit the use of foamed latex (sponge rubber) for cushions when considered desirable by the manufacturer.

Longer Bumpers

To provide better protection for fender ends and sides, General Motors cars and Nash at least will use longer front and rear bumpers. Grille guards will also be more effective again perhaps a lesson from cars in service during the past four or five years.

Detailed information on the various makes of automobiles is, of course, not yet available. The manufacturers' engineers may know what their forthcoming cars are going to be like, but as to most of them, no one else, even the dealers, knows yet, in any detail. Only the general outlines of the new cars' characteristics, specifications, etc., are available at this time; such preliminary information as is available is presented below: more will follow in our next BULLETIN.

Buick will commence production with the Series 50 in the 4-door sedan and station wagon models. No major changes are expected, but there will be refinements plus a restyling of interior and exterior. The floating type oil screen, which CR considers a satisfactory device, is continued in use in preference to an oil filter; coil spring suspensions for both front and rear are also being continued in 1946 cars.

Chevrolet. Specific information was not available on this car at the time of writing. due to Chevrolet's policy of not disclosing any details to the public until all dealers had been fully informed both on the cars and merchandising plans. One Chevrolet dealer had no information on October 29, just a few days before the date set (November 3) for details to be made public. Newspaper advertising, however, appears to indicate that there have been no significant changes in this car except in styling.

Ford V-8 will have a more powerful engine developing 100 horsepower at 3800 revolutions per minute instead of the 90 h.p. at the same speed, of the 1942 engine. This has been accomplished by increasing the bore (diameter) of the cylinders, and raising the compression ratio from 6.2:1 to 6.4:1. Pistons will be of aluminum alloy, with four rings instead of three. A 6-cylinder 90 h.p. engine will be available later for those who prefer it. The *Ford* engine will have an oil filter as standard equipment.

The bearings for crankshaft and connecting rods will be made of a new alloy of silver, copper, and lead which is said to have been used successfully in military vehicles, giving a much longer life than previous bearings.

Riding qualities should be improved by the use of softer springs which have a larger number of leaves. Improvements have also been made on the brakes by the use of floating shoes to equalize the wear on the linings.

Hudson will confine production at first to 6-cylinder models of the Super and Commodore with a wheelbase of 121 inches. Major specification of the engines will remain unchanged from 1942. The Hudson "Drive Master" semi-automatic transmission will again be available. Hudson will also continue the very desirable hydraulic-mechanical braking system which renders possible safe application of the brakes through a mechanical linkage in the event of failure of the hydraulic system. It is hoped that other car manufacturers will bestir themselves to adopt some similar or equivalent system of braking available in an emergency.

Mercury. The 100 h.p. engine will be continued in Ford's Mercury, which will also embody all the improvements that

are to be used on the 1946 Ford engine.

Nash. On the Nash 600 the Lancia type of independent front wheel suspension, which CR reported in the February 1941 BULLETIN on automobiles would likely cause some scuffing of the treads of the tires. has been abandoned in favor of the Sizaire (parallel arm) type of suspension. The engine has larger valves and longer valve guides and the transmission has been improved in the direction of durability and quietness by the use of larger and stiffer mainshafts and larger gears. The horsepower of the engine has been increased by about 8%; the single unit body frame which eliminates the need for the chassis frame and saves weight has been continued. The horsepower of the Nash Ambassador engine has been increased by about 7%, from 105 to 112, partly by increasing the compression ratio.

Oldsmobile will start production with the "70", followed by the "90" and finally the "60". The Hydra-Matic transmission has been redesigned; this it is believed will be a much more dependable and durable product than this transmission

as used in 1942. The Oldsmobile "60" and the "70" 6-cylinder will develop 100 h.p. at 3400 rpm., the "70" and the "90" 8-cylinder, 110 h.p. at 3600 rpm., the same as in 1942. Rear bumpers on the "70" and "90" have been continued around the fenders as a protective measure. Oldsmobile is instructing dealers to acquaint customers with the fact that the delivery of new cars lies a long way in the future. In the interim, for all who require them, complete 6-cylinder replacement engine assemblies are available for 1937 to 1940 models inclusive at a list price of \$165. Engines for 1941 and 1942 6-cylinder cars and 1937 to 1942 8-cylinder cars will be available later.

Packards for 1946 are very much like the 1942 models in all their major mechanical characteristics. A new type of bearing which has been widely employed in Army equipment has been adopted for main and connecting rod bearings. (The steering mechanism has also been improved.)

As before the war, there are three *Packard* engines: a six and two eight's; the larger eight having approximately 25%

greater piston displacement than the smaller one.

Pontiac. Present information indicates many minor mechanical improvements, but no significant departures from the 1942 models. Various mechanical improvements have been made and optional gear ratios will again be available (3.9 for economy and 4.55 for drivers living in mountainous sections of the country)-instead of the standard 4.3 ratio. There will also be an optional compression ratio of 7.5 (the standard ratio is 6.5).

Studebaker Champion will have essentially the same engine as that used in the military vehicle known as the Weasel. The horsepower developed will be 80 h.p. at 4000 rpm. Independent wheel suspension is of the Planar type, using a transverse spring similar to that previously used by Studebaker. Included in the standard equipment are many items which previously were de luxe equipment.

Cars for which no information was available at the time of writing include Chrysler, Crosley, DeSoto, Dodge, Plymouth, and Willys.

* * * * * Correction Notes * * * * *

Col. 368 ACB '45-'46 and Page 25, Col. 1 October '45 Lux soap flakes should be classified under the heading Pure Flake, Chip, and Bead Soaps, not under "Flake, Chip, and Bead Soaps with Builders and Fillers." Through an error

in the laboratory, this soap was incorrectly reported as a soap with builder. Further analytical work has definitely established that this soap is essentially a pure soap not containing builders, since the alcoholinsoluble matter (indicative of builder content) amounts to something less than 1%. Water-insoluble matter, consisting of various foreign substances and any fillers that may be present, was small and well below the Federal Specification limit for soap of this type. The total amount of non-soap material found is a normal concomitant of large-scale

manufacture of soap products and does not represent any practical disadvantage to the consumer. Lux is thus continued with an A rating, but transferred to the category of Pure Flake, Chip, and Bead Soaps.

Commercial Vitamin Combinations Col. 264-269 ACB '45-'46

and Correction note on this item Page 25 October '45 The prices given in the Annual Cumulative Bulletin were, as noted, compiled in January 1944. Subsequent to that time there have been marked downward trends in retail prices of vitamin preparations. The January 1944 price of 100 Dayamin tablets, for example, was \$7.74. In

For continuation of Correction Notes, see page 31

Rubber Footwear for Men, Women, and Children

COME dealers' shelves, natural-Iy, still carry "duration" or "conservation" footwear of inferior quality; nevertheless the quality of rubber footwear in general has improved greatly over the footwear produced during the early war years. The improvement is evidenced particularly by an increase in the wear resistance of soles and heels, and it may be attributed in part, at least, to an increase in knowledge gained by the manufacturers in the production and utilization of synthetic rubber. Rubber footwear, of course, has never been made of very high-grade rubber compounds, reclaimed or re-used rubber being in wide use-and no doubt good enough for the service in many cases.

In dissecting the samples for test, it was noted that the various layers making up the shoe or rubber were more readily separated in the "duration" grade articles than with prewar footwear. This probably reflects the troubles said to exist in cementing sheets containing synthetic rubber, but the decrease of adhesion was not considered serious enough to effect life of rubbers to a significant degree.

Care of Rubber Footwear

The manufacturers usually recommend washing the surface of rubber footwear after each use, removing immediately any residue of oil, fat, or grease (which cause quick injury to rubber), drying out the linings away from direct heat, and storing in a cool, dry place

-free of folds and wrinkles.

Purchasing rubbers or overshoes of the correct size provides an important safeguard against premature wearing out of the articles, for if the footwear is too tight or too snug a fit, there will be excessive strain when it is pulled on. This is important with some synthetic rubber (GR-S) which is less tear-resistant than natural rubber. Too loose a fit can result in damage to both the rubbers and the shoes.

CR's Tests

Samples were dissected and construction features noted in accordance with a table of preestablished check points such as toe pieces, counters, heels, foxing strips, linings, etc.; in addition, for the women's and children's footwear, the crotch and tabs were assigned points for quality rating. See Figure 1. In the children's footwear, the abrasion figures ranged from 164 to 387, the best giving a probable wear-

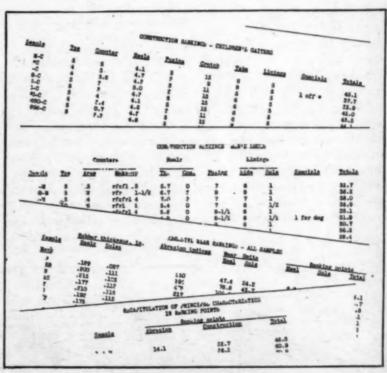


Figure 1

The above reproduction shows small portions of some of the 12 data sheets recording the hundreds of observations and calculations entering into these ratings. These samples of the lest data give an idea of the vast amount of study, testing, and "figure-work" that is summed up in a few brief lines, in CR's final rating of a product as Recommended, Intermediate, or Not Recommended.

life well over twice that of the poorest rubber. The best men's rubbers (Converse Patriot) had a resistance to abrasion of 752 compared to 202 for the poorest. Though the rubber having the poorest abrasion resistance was marked as "duration" or "Victory" quality, the poorest rubber on tootwear not identified as of wartime quality had an abrasion resistance that was not appreciably better (233).

Abrasion tests were made on the rubber from the heels of each sample (the soles being made of the same rubber compound), in accordance with the method of Federal Specification ZZ-O-841. Two specimens of each sample were tested, and when results on these failed to agree within 10 percent, two additional specimens were test-There were startling differences in a number of cases in the average abrasion resistances of the rubber of the sole and heel between different brands. Sole and heel abrasive resistances are, of course, important factors in determining the life of the rubber when it is given hard use; note the great difference in the abrasion figure given in the listings of women's boots and galoshes between the American Platoon Boot and the Sears 9725, the former having a probable wear-



A Rubber Dissected for Test

The picture above shows what was left after removal of pieces for examination and measurements and for abrasion tests.

life of five times the latter.

It is interesting to note that in the men's rubbers, with one exception, brands which were identified as *Duration*, *Victory*, or *War Standard Quality* ranked low in resistance to abrasion in comparison to rubbers not so marked or identified. However, the *Endicott Johnson*, which was identified as "Defense" qual-

ity only by an enclosed printed slip, ranked very high in abrasion resistance. The high abrasion resistance and other good qualities of this rubber appear to indicate that in spite of government regulations, critical shortages of materials, etc., at the beginning of the war, some manufacturers have been able, probably because of improved techniques of production, to bring the wearing quality of their rubber compounds and other characteristics up to pre-war standards.

All the rubbers listed were bought about the same time, during the second week of Sep-

tember, 1945.

In addition to a general statement of the abrasion-resisting characteristics of the sole and heel, a number is given in parentheses to give the actual abrasion index (a ratio of wear of the sole and heel rubber of the purchased sample to wear of a standard test specimen, multiplied by 1000 to give whole numbers).

Where rubbers were marked or otherwise identified to show that they were of wartime quality, this fact is indicated in the

listings.

As previously stated, dealers' shelves for some time to come are likely to carry considerable stocks of poor quality "duration" rubbers. When goodquality rubbers made under more favorable post-war conditions appear in retail stores, consumers would do well to avoid, in so far as possible, purchase of war-grade rubber footwear. As this report shows, some of the latter may be of very good grade, but those which were produced during the early period of the wartime, when quality of the available material was at a low ebb, would be a good buy only if available



Three types of men's rubbers, "sandal," "storm," and "clog" (from left to right).

at bargain prices. (They might, however, if inexpensive, serve well enough for persons who are easy on their footwear.)

Ratings are cr45.

Men's Rubbers

A. Recommended

Converse Patriot, No. 7070 (Converse Rubber Co., Malden, Mass.) \$1.98. Storm type. Ranked highest in resistance to abrasion of sole and heel rubber (752), about 35% better than Endicott Johnson, which ranked second in this respect, and 270% better than Trico brand. Above average in details of construction.

Endicott Johnson, No. 4848M (Endicott Johnson Corp., Johnson City. N.Y.) \$1.44. Sandal type. Ranked second in resistance to abrasion of sole and heel rubber (562) and in details of construction. Slip enclosed with rubbers indicated them to be of "Defense quality."

Goodyear Berwick, No. MS 523 (Goodyear's I.R.G. Mfg. Co., Naugatuck, Conn.) \$1.50. Sandal type. Ranked third in resistance to abrasion of sole and heel rubber (475) and highest in details of construction.

B. Intermediate

Ball-Band Riley, No. 7150 (Mishawaka Rubber & Woolen Mfg. Co., Mishawaka, Ind.) \$1.98. Clog type. Unlined, but had a fabric insole. Ranked fourth (about average, with Tyer brand) in resistance to abrasion of sole and heel rubber (394). Above average in details of construction.

Goodrich "Duration" Quality, No. 2161
(B. F. Goodrich Co., Footwear Division) \$1.73. Sandal type. Ranked sixth (below average) in resistance to abrasion of sole and heel rubber (312). Below average in details of construction.

Tyer Dover, No. 931 (Tyer Rubber Co., Andover, Mass.) \$1.49. Sandal type. Ranked fourth (about average, with Ball-Band brand) in resistance to abrasion of sole and heel rubber (395). Below average in details of construction.

C. Not Recommended

American Ardsley, No. MS 527 War Standard (American Rubber Co.) \$1.44. Sandal type. Ranked seventh (below average) in resistance to abrasion of sole and heel rubber (250). About average in details of construction.

C.O.T. (Tingley-Reliance Rubber



Three styles of women's footwear tested—From left to right: Boot type with strap, two-snap gaiter, and strapless boot type.

Corp., Rahway, N.J.) \$1.50. Sandal type. This brand had no lining; lack of this feature made it difficult to pull the rubber over and remove from shoes. Ranked eighth (well below average) in resistance to abrasion of sole and heel rubber (233) and lowest in details of construction.

Hood "Duration Quality" Lastics (Hood Rubber Co., Div. of B. F. Goodrich Co.) \$1.65. Sandal type. Ranked tenth (next to lowest of the men's rubbers tested) in resistance to abrasion of sole and heel rubber (205) and details of construction.

Trico Victory Line, No. R 9040. \$1.70. Sandal type. Ranked lowest of men's rubbers in resistance to abrasion of sole and heel rubber (202) but about average in details of construction.

U.S. Ardsley, No. MS 523 Duration Quality (United States Rubber Co., Naugatuck, Conn.) \$1.65. Sandal type. Ranked ninth (well below average) in resistance to abrasion of sole and heel rubber (217) but above average in details of construction.

Women's Boots and Galoshes

A. Recommended

American Platoon Boot, No. WR 821 (American Rubber Co.) \$2.45. Had strap and buckle fastening across instep. Ranked highest in resistance to abrasion of sole and heel rubber of women's footwear tested (508) (about 400% better than Sears in this respect) but was below average in details of construction.

Goodrick Military Boot (B. F. Good-

rich Co., Akron, Ohio) \$3. Had strap and buckle fastening across instep. Ranked third in resistance to abrasion of sole and heel rubber (376), second in details of construction.

Goodyear's Parade Overboot, No. WR 842 (Goodyear's I.R.G. Mfg. Co., Naugatuck, Conn.) \$3. Ranked second in resistance to abrasion of sole and heel rubber (476). Average in details of construction.

Hood Flightboot (Hood Rubber Co., Div. of B. F. Goodrich Co., Watertown, Mass.) \$3. Had strap and buckle fastening across instep. Ranked fourth in resistance to abrasion of sole and heel rubber (287) but was best of women's footwear tested in details of construction.

B. Intermediate

Ball-Band Corporal, No. N7010L (Mishawaka Rubber & Woolen Mfg. Co., Mishawaka, Ind.) \$2.99. Boot type. Ranked fifth (below average) in resistance to abrasion of sole and heel rubber (277). Below average in details of construction.

Commonwealth (Montgomery Ward's Cat. No. 26—9582) \$1.45, plus postage. Two-snap gaiter type. Ranked sixth (below average) in resistance to abrasion of sole and heel rubber (252). Average in details of construction.

C. Not Recommended

Sears (Sears-Roebuck's Cat. No. 76—9725) \$1.45, plus postage. Two-snap gaiter. Poor in resistance to abrasion of sole and heel rubber (103)

(lowest of all footwear tested). About average in details of construction.

U.S. Parade Overboot, No. WR 842 (United States Rubber Co., Naugatuck, Conn.) \$2.95. Ranked seventh (much below average) in resistance to abrasion of sole and heel rubber (164). About average in details of construction.

Children's Gaiters

All of the children's footwear tested was of the two-snap lined type.

A. Recommended

Commonwealth (Montgomery Ward's Cat. No. 26—9680) \$1.40, plus postage. Easily the best of the children's footwear tested, with highest resistance to abrasion of sole and heel rubber (387), and, with American Ortho, highest in quality of details of construction.

Sears (Sears-Roebuck's Cat. No. 76—9896) \$1.40, plus postage. Ranked fifth (about average) in resistance to abrasion of sole and heel rubber (264) and in details of construction. U. S. Cameo Ortho, No. CR 630 (Unit-

ed States Rubber Co., Naugatuck, Conn.) \$1.88. Ranked second in resistance to abrasion of sole and



The two-snap gaiter type of children's rubber footwear that was included in CR's tests.

heel rubber (324) and fourth (above average) in details of construction.

B. Intermediate

Cambridge Raynshu, No. 1914 (Cambridge Rubber Co., Cambridge, Mass.) \$1.99. Ranked third, with Hood, in resistance to abrasion of sole and heel rubber (296). Below average in details of construction.

Goodyear's Plaža Ortho, No. JR 630 Conservation Quality (Goodyear's I.R.G. Mfg. Co., Naugatuck, Conn.) \$1.88. Ranked seventh (below average) in resistance to abrasion of sole and heel rubber (215) but was above average in details of construction.

Goodrich Spattershu, No. 2222 (B. F. Goodrich Co., Akron, Ohio) \$1.88. Ranked sixth (below average) in resistance to abrasion of sole and heel rubber (237) and below average in details of construction.

Hood Wintershu (Hood Rubber Co., Div. of B. F. Goodrich Co., Watertown, Mass.) \$1.45. Ranked third, with Cambridge, in resistance to abrasion of sole and heel rubber (296). Below average in details of construction.

C. Not Recommended

American Ortho, No. CR 576 (American Rubber Co.) \$1.51. Ranked next to lowest among children's footwear in resistance to abrasion of sole and heel rubber (172), but, with Ward's Commonwealth, best in details of construction.

Ball-Band Euclid, No. N2061C (Mishawaka Rubber & Woolen Mfg. Co., Mishawaka, Ind.) \$1.88. Ranked lowest of all children's footwear tested in resistance to abrasion of sole and heel rubber (164). About average in details of construction.

Blankets — Wool, Part-Wool, and Cotton

This is the month when consumers are likely to buy more blankets and comforters than in any other month of the year. Retailers are looking forward to even more sales than usual because of returning servicemen who will be purchasing bedding for their new or reopened homes. Fortunately, the military "freeze" on blankets was revoked by the War Production Board last July, just

in time for retailers to receive sufficient stocks for the height of their 1945 blanket-selling season,

The probabilities are that more of these blanket-buyers will purchase all-wool blankets than part-wool ones. Wool has many natural characteristics which make its use for blankets desirable, and most of these contribute to what most consumers look for when buying

blankets—beauty, warmth and comfort, and durability. These factors depend, however, to an important degree on the care and skill used in blanket manufacture, as well as on the wool content of the finished product.

The Manufacture of Blankets

The first step in blanket manufacture is to select the fibers to be used. Wool fibers are sorted and graded, scoured, bleached, and then dyed. The yarns for the blankets are then spun—the warp yarns are somewhat tightly twisted, the filling yarn lightly twisted so as to be suitable for napping.

Blankets are customarily woven in widths of 100 inches or more, and then shrunk or "fulled" to widths of as little as 72 inches. The fabric is then napped by vegetable teasels or wire teeth. For careful napping, teasels are used since they do less damage to the fiber than wire teeth are likely to do. After napping, the blanket is "finished" by shearing, brushing, binding, or stitching.

Beauty in Blankets

In wool blankets, much of the beauty of the texture depends on the quality of the wool used. Wool fibers vary in quality not only with the breed and health of the animal from which they are taken but with the climate, the care, the number of clippings, and other factors. On a single sheep the wool may be of seven or more grades; the wool on the legs is torn and ragged and practically worthless, while the wool from the shoulders is considered the most choice.

In 1931, the U.S. Department of Agriculture established a standard method for dividing wool into 12 grades according to the fineness of the fiber. Generally speaking the finer the crimps (fine, dense curls or waves) the finer the grade. The crimps are less pronounced as the wool becomes coarser. Great length of fiber is generally associated with coarseness. A fabric is seldom made from one grade of wool, however. Blends. are made to produce the character of yarn that is desired. In blanket manufacture, for example, long-fibered wools are used for long nap; short-fibered wools with more crimp are used for lightweight warm blankets. In rating the wool blankets tested, it was considered that wool with a fineness of 58s and over was very good, 56s/58s good, 52s/54s fair, and less than 52s unsatisfactory. Even fine wool, however, may become unduly harsh or felted if blanket fabrics are not "fulled" or shrunk carefully.

Blankets are dyed in a great variety of attractive shades, but some of the colors tend to be less fast than others. The consumer should open blankets wide when purchasing and examine the color all over, as there may be some unevenness of dyeing, or perhaps some fading at edges.

Blankets may have a rayon binding or a stitched edge. Rayon bindings, while attractive in appearance, are not to be expected to wear as long as the blankets themselves, and they will have to be replaced from time to time. Original bindings should be carefully stitched and the ends should be neatly turned and finished. Stitching should be examined to see that it is well done and secure.

Warmth and Comfort

A wool blanket is warm because wool fibers retain the warmth of the sleeper's body. This natural quality is enhanced by napping, which increases the number and size of the air pockets in a blanket. Each of these pockets holds still, dry air through which the transfer of heat from the body to the cold air of the room is greatly retarded.

Wool has high capacity to absorb moisture without feeling damp—up to as high as 30% of its own weight. For this reason wool blankets are ideal for damp climates or for use as outdoor or camping blankets.

Part-wool blankets may, at times, seem to be a more desirable purchase than all-wool blankets, particularly if the price of all-wool blankets seems too high. Such blankets, properly constructed, have good warmth-retaining properties. although it is generally agreed that a blanket should contain at least 25% of wool for warmth. It is most desirable that cotton yarns be used in the warp only. of a cotton-and-wool blanket. If cotton is used in the filling yarns as well, the heat-retaining properties of the blanket will be markedly less than those of an all-wool blanket: otherwise the difference in warmth value will not be great.

Permanently crimped rayon fibers used in combination with wool makes blankets of a very attractive appearance. Rayon, however, does not possess as great resiliency as wool, and use and washing may be expected to deteriorate the rayon-and-wool blanket much more than an all-wool blanket.

The consumer should remember that both rayon and cotton when napped catch fire very easily (wool does not).

Although lightness in a blanket is desirable, studies have shown that blankets weighing less than 12 ounces per square yard (corresponding to about 3½ pounds for a 72 x 84 inch blanket) are likely to be lacking in warmth or strength, or both. If the weight of the blanket is not shown on the labels, consumers should ask clerks to provide this information, by actual weighing of the blanket and noting the weight on the sales slip.

Durability

A blanket that is well made and well cared for should give years of useful service. Durability, however, depends on many things, some of which cannot be easily ascertained by the consumer when making his purchase.

The nap, of course, should be firmly secured, and this can be judged roughly by rubbing a portion of it with a circular motion of the finger. If the nap "wears off" with this process, chances are that the blanket has been overnapped. A more severe test, but one that the consumer might hesitate to use in the average department store, and which the department store manager would strongly object to if the blankets are not of good grade, is to lift the blanket by the nap that can be grasped between the thumb and two fingers. The strength of the nap and its anchoring in the fabric should be great enough to permit the blanket to be lifted in this manner.

Because of the nap, the closeness of the weave of a blanket is not easy to judge, but it can be seen if the blanket is held close to a strong light.

Blankets are not ordinarily subjected to much pulling strain, unless they are too short for the bed or the sleeper. It is a good rule to purchase blankets which are six inches longer than the mattress on which they are to be used. Lack of proper tensile strength is probably made most evident when blankets are washed, for an abnormally weak blanket may almost fall to pieces in the washing, because of the handling it receives and the great weight of the blanket when saturated with water. Heavier blankets

need extra strength to withstand without damage the wear they receive in use and laundering.

Cotton Blankets

Cotton blankets, although they are sometimes used as summer blankets, are also used as sheets in winter. They have a soft nap that keeps out the chill better than a sheet and do not have the cold feeling that cotton or linen sheets do. The weave of a cotton blanket should be close, the nap firm, and the tensile strength adequate to withstand washing. As with wool blankets, stitching should be strong and bindings should be well finished.

CR's Tests

The tests and examinations made by Consumers' Research of wool blankets included fiber identification and identification of wool grades, tensile strengths, thread count, colorfastness to light and washing of both blanket and binding, an abrasion test, and measurements of shrinkage.

A warmth test was also made, using a heat transmission apparatus of the guarded hotplate type. Specimens were laid flat without tension upon an electrically heated copper plate which had been finished to have heat loss characteristics identical with those of the human skin. Input energy was controlled and guard plates, maintained at the same temperature as the hot plate, were arranged to prevent heat losses occurring except through the material of the blanket. Heat loss determinations were made in still air, both as received and after a treatment planned to reproduce effects of actual use, and in air in motion. Differences in warmth-retaining properties in the all-wool blankets tested were not large, amounting to about 10% in tests made in still air and moving air and in still air after mechanical treatment simulating conditions of blanket usage. Such differences are not significant enough to be given much weight.

Cotton blankets were given the same tests excepting that tests for warmth-retaining properties were made in still air on only two, the Nashua All-Year and the Whitestone (to compare this property in representative cotton blankets with wool blankets). The Nashua had about 61%, the Whitestone (measured as a double thickness because it was a double blanket) about 87% the warmth-retaining property in still air of the average of the wool blankets tested for warmth properties. All of the cotton blankets tested showed about the same amount of shrinkage in test, with the exception of one which showed a slight gain in width after washing.

In the listings, figures in parentheses after actual measured sizes are the nominal sizes of the blankets as stated on the labels. Colorfastness of the blankets and binding to washing and to light were good except as noted.

For the convenience of our subscribers, listings from last year's tests of blankets are repeated, since there is a good reason to believe that the blankets being sold this year are essentially of the same quality as those sold and tested last year. Brands different from those included in last year's tests were, therefore, selected for this year's tests. (Last year's listings are identified by the symbol "cr44.")

(Continued on page 17)

Cumulative Index for Consumers' Research Bulletins July 1945 through December 1945

(Vol. 16, No. 1 through Vol. 16, No. 6.)

Single BULLETINS are available, at 30 cents. The month of issue is followed by the number of the page or pages on which the item appears.

Entries marked (*) are longer or more comprehensive items.

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Appliances, household, availability		socks, men's
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Automobiles		suits, men's
air-conditioning systems predicted		meager supply
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1946	Dec5-8*	white, removing scorch
100-octane gasoline		Coffee, soluble
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radiator cleaners		Corn mussin and other mixes, prepared at homeOct3
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D		Creams, hormone
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Dytell closures.		F
		Editorial, each issue, beginning at page 2*
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	Dec9-12*	corn muffin and other mixes,
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IIIGH D GI COD:		

Month Page	Month Don
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	Prune paste, as a dog food
Gasoline, 100-octane	Trunc paste, as a dog rood
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Hosiery, women's silk, availabilityNov3	Shampoos, some taxable
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treating preparations	men's dress
*	scarčity
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	Soap, being stretched with buildersOct3; Nov29
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M	Sweepers, carpet
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Mildew-proofing agentsJuly11-15*	- chains, araminam cooking, aman tactics Dept
Milk, in relation to acneOct4	Vitamins and vitamin preparationsAug4, 20-21*;
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	Wax paper roll holderJuly31
Nipples, rubber, nursing bottleSept10-12*	Windows, gadget for drying
* Tippies, rubber, nursing bottleSept10-12*	Windowshades, cleaningJuly3

All-Wool Blankets

A. Recommended

Kenwood, Famous (Kenwood Mills, F. C. Huyck & Sons, Albany, N.Y.) \$14.95. Peach. 71 x 841/4 in. (72 x 84 in.). 15.2 oz. per sq. yd. Wool, of fair grade, with a trace of viscose rayon and cotton. Blanket binding showed noticeable, but not objectionable, fading in light-exposure test. Tensile strengths best of the blankets tested: of warp, 96 lb. (more than twice the minimum warp breaking strength suggested for this kind of blanket); of filling, 45 lb. (well above the minimum breaking strength for the filling yarns suggested for this kind of blanket). Thread count, 28 x 19, relatively low, but meets 24 x 16 minimum suggested for this kind of blanket.

B. Intermediate

American (American Woolen Co., 225 Fourth Ave., New York 3, New York: distributed by Gimbel Bros., Inc., New York City) \$8.95. Blue. 74 x 84 in. (72 x 84 in.). 14.2 oz. per sq. yd. Wool, of good grade, and mohair, with a trace of cotton. Blanket showed a rather serious degree of fading; binding faded slightly in light-exposure test. Tensile strengths: warp, 57 lb.; filling, 39 lb. (both well above the suggested minimum requirements). Thread count, 24 x 18, lowest of blankets tested, but meets 24 x 16 minimum suggested for this kind of blanket. cr44 '

Chatham, Woolwich (Chatham Mfg. Co., Elkin, N.C.) \$10.95. Blue. 71 x 83½ in. (72 x 84 in.). 17.3 oz. per sq. yd. Wool, of good grade, with a trace of cotton and viscose rayon. Blanket showed a rather serious degree of fading in light-exposure test. Tensile strengths: warp, 57 lb.; filling, 32 lb. (much too low). Thread count, 26 x 26. cr44

Faribo, Northwood (Faribault Woolen Mill Co., Faribault, Minn.) \$12.98. Blue. 72 x 89 in. (72 x 90 in.). 18.2 oz. per sq. yd. Wool, of fair to unsatisfactory grades. Tensile strengths: warp, 80 lb.; filling, 45 lb. Thread count, 28 x 20. Warmthretaining properties, about average. Abrasion resistance, fair. Colorfastness of blanket to light, poor; of binding, fair. Shrinkage, less than average.

Lady Seymour, Style 44 (Seymour

Woolen Mills, Seymour, Ind.) \$11.95. Blue. 74 x 90 in. (72 x 90 in.). 13.4 oz. per sq. yd. Wool, of good grade in warp, unsatisfactory in filling. Tensile strengths: warp, 71 lb.; filling, 34 lb. Thread count, 27 x 21. Warmth-retaining properties, below average. Abrasion resistance, lowest of blankets in the 1945 test. Colorfastness of blanket to light, poor; of binding, fair. Shrinkage, less than average, best of blankets tested in this respect.

North Star, Starlight (North Star Woolen Mill Co., Minneapolis 1) \$13.95. Rose dust. 73½ x 83¼ in. (72 x 84 in.). 14.2 oz. per sq. yd. Wool, of very good to good grades, with a trace of cotton. Blanket binding showed slight fading in light-exposure test. Tensile strengths: warp, 37 lb. (low); filling, 42 lb. Thread count, 27 x 32. cr44

Welwyn by Nashua (Nashua Mfg. Co., Nashua, N.H.) \$13.95. Rose. 74 x 90¾ in. (72 x 90 in.). 14.3 oz. per sq. yd. Wool, of good to fair grades. Tensile strengths: warp, 42 lb.; filling, 23 lb. (too low). Thread count, 26 x 18. Warmth-retaining properties, above average of all-wool blankets included in 1945 test. Abrasion resistance, best of all blankets tested. Shrinkage, greater than average.

Wool O' the West, The Vogue (Portland Woolen Mills, Portland, Oreg.) \$13.95. Dusty rose. 73 x 84½ in. (72 x 84 in.). 14.4 oz. per sq. yd. All wool, of very good to good grades. Tensile strengths: warp, 30 lb. (low); filling, 44 lb. Thread count, 25 x 32. cr44

Fieldcrest, Nobility (Marshall Field & Co., Inc., Manufacturing Division, New York City) \$16.95. Dusty rose. 70 x 90 in. (72 x 90 in.). 16.3 oz. per sq. yd. Wool, of very good grade. Tensile strengths: warp, 68 lb.; filling, 25 lb. (too low). Thread count, 40 x 23. Warmth-retaining properties, above average of all-wool blankets included in 1945 test. Abrasion resistance, good. Colorfastness of blanket to light, poor; of binding, fair. Shrinkage, greater than average.

Mariposa, Lonemoor (Schuler & Benninghofen, Hamilton, Ohio) \$14.95. Dusty rose. 75½ x 92 in. (72 x 90 in.). 17.6 oz. per sq. yd. Wool, of fair grade. Tensile strengths: warp, 42 lb. (a little lower than best practice calls for); filling, 51 lb. Thread count, 23 x 20, near the minimum that should be allowed for a wool

blanket. Warmth-retaining properties, best of the seven all-wool blankets included in the 1945 test. Abrasion resistance, good. Color-fastness of binding to both washing and light, fair. Shrinkage, very little. Considered best blanket of the B group.

St. Marys, Jefferson (St. Marys Woolen Mfg. Co., St. Marys, Ohio) \$14.95. Rose. -71½ x 83¼ in. (72 x 84 in.). 13.7 oz. per sq. yd. Wool, of good grades, with a trace of mohair, viscose rayon, and cotton. Blanket binding showed noticeable fading in light-exposure test. Tensile strengths: warp, 39 lb.; filling, 53 lb. Thread count, 26 x 34. cr44

Slumbersound, No. 8131 (Sears-Roebuck's Cat. No. 56—8131) \$14.19, plus postage. Rose. 69½ x 84½ in. (72 x 84 in.). 14.8 oz. per sq. yd. Wool, of very good grade, and mohair. Tensile strengths: warp, 106 lb. (very high); filling, 32 lb. (low). (Tensile strengths of this blanket showed very poor balance.) Thread count, 39 x 46. cr44 3

Springfield, Regina (Springfield Woolen Mills, Springfield, Tenn.; distributed by Wamsutta Mills, New Bedford, Mass.) \$14.98. Blue. 72 x 85 in. (72 x 84 in.). 13 oz. per sq. yd. Wool, of very good quality, and mohair; the fiber in this blanket was of the highest quality of any of the blankets in the 1944 and 1945 tests. Blanket showed a rather serious degree of fading in light-exposure test. Tensile strengths: warp. 74 lb.; filling, 23 lb. (low). Thread count, 29 x 42. cr44

Ward's (Montgomery Ward's Cat. No. 18—3620) \$13.98, plus postage. Rose. 72 x 83 in. (72 x 84 in.). 13.5 oz. per sq. yd. Wool, of good to fair grades. Tensile strengths: warp, 41 lb.; filling, 47 lb. (Ward's claim: 58 lb. warp, 43 lb. filling.) Thread count, 26 x 33. Warmth-retaining properties, below average of blankets tested in 1945. Abrasion resistance, good. •Colorfastness to light, fair. Shrinkage, greatest of all blankets tested.

C. Not Recommended

Pearce Pride (Pearce Mfg. Co., Latrobe, Pa.) \$10.95. Peach. 71 x 84 in. (72 x 84 in.). 13.7 oz. per sq. yd. Wool, of fair to unsatisfactory grades. Tensile strengths: warp, 55 lb.; filling, 14 lb. (much too low). Thread count, 33 x 21. Warmthretaining properties, about average.

Abrasion resistance, fair. Colorfastness to light, poor. Shrinkage, about average. 2

Part-Wool Blankets

B. Intermediate

Chatham, Marley (Chatham Manufacturing Co., Elkin, N.C.) \$7.95. Blue. 723/4 x 853/4 in. (72 x 84 in.). 13.5 oz. per sq. yd. 50% wool, of fair grade, 50% cotton. Blanket showed noticeable fading in the light-exposure test. Tensile strengths: warp, 47 lb.; filling, 23 lb. (much too low). Thread count, 35 x 44. cr44

Purrey by Nashua (Nashua Mfg Co., Nashua, N.H.) \$6.45. Rose dust. 74 x 89½ in. (72 x 90 in.). 12.2 oz. per sq. yd. 88% viscose rayon and 12% wool, of very good grade. Slight fading in light-exposure test. Tensile strengths: warp, 41 lb.; filling, 42 lb. Thread count, 30 x 35. This blanket's B. Intermediate rating applies if it is to be used in service where it would not be subjected to much use and laundering, as for ex-

ample a spare or guest room blanket. cr44 1

Slumbersound, No. 8582 (Sears-Roebuck's Cat. No. 56—08582) \$6.70, plus postage. Rose. 71½ x 83½ in. (72 x 84 in.). 13.9 oz. per sq. yd. 50% wool, of fair grade, 50% cotton. Blanket showed a serious degree of fading in light-exposure test. Tensile strengths: warp, 53 lb.; filling, 40 lb. Thread count, 40 x 42 (good and well balanced). cr44

Cotton Blankets

A. Recommended

Nashua, All-Year (Nashua Mfg. Co., Nashua, N.H.) \$1.75. Blue. 74½ x 90½ in. (72 x 90 in.). 1 lb. 13 oz. Tensile strengths: warp, 54 lb.; filling, 26 lb. Thread count, 30 x 28. Abrasion resistance, second best of cotton blankets tested.

B. Intermediate

Nashua, Winsum (Nashua Mfg. Co.) \$1.75. Green. 75 x 89½ in. (72 x 90 in.). 1 lb. 12 oz. Tensile strengths: warp, 51 lb.; filling, 27 lb. Thread count, 30 x 28. Abrasion resistance, best of cotton blankets tested. Color-fastness of blanket to washing, fair; of blanket and binding to light, poor. Ward's Supreme Quality Fleecydown

Vard's Supreme Quality Fleecydown (Montgomery Ward's Cat. No. 18—3130) \$1.29, plus postage. White with pink stripes and woven edging. 72 x 84 in. (72 x 84 in.). 1 lb. 11 oz. Tensile strengths: warp, 54 lb.; filling, 23 lb. Thread count, 30 x 25. Abrasion resistance, third, of cotton blankets tested. Colorfastness of blanket to washing, poor. Slight increase in the width direction of the blanket after washing.

C. Not Recommended

Whitestone Starland. \$2.79. White with pink and blue stripes, woven edging. 68 x 156 in. (70 x 160 in.). 2 lb. 9 oz. Tensile strengths: warp, 51 lb.; filling, 39 lb. Thread count, 30 x 29. Abrasion resistance, poorest of the four cotton blankets tested. Colorfastness of blanket to washing, poor. Shrinkage, greatest of cotton blankets tested.

* * * * Soluble Coffee—* * * *

Not the Best Breakfast Beverage

By JAMES DRIVER

HE EXTENSIVE use of instant or soluble coffee by our Armed Forces has been an important factor in stimulating manufacturers to enter this field, and now it seems likely that one of the interesting postwar advertising battles will be waged between coffee promoters and those who are pushing soluble brands. This will, in all likelihood, be a double-barreled conflict, for there will be, first, the attempt of the instant-coffee people to capture a larger and larger proportion of the total coffee business and, second, the intra-mural strife between the two types of soluble coffee.

It seems likely that the soluble products will do pretty well in gaining an increased percentage of consumers. A recent sampling survey by Parent's Magazine Consumer Service showed that some 80% of 1500 of the magazine's "Consumer Advisors" regarded their samples of soluble coffee as Excellent or Good. The history of prepared cereals, prepared baby foods, prepared baking mixes, of frozen foods and ready-toeat cereals and soups all show that the words "quick" and "convenient" are magic words in promoting sales to the American housewife. Easy to prepare, easy to regulate as to

strength, soluble coffees leave no messy grounds to get rid of and no pot to wash-though the cost per cup will be little higher than the cost of good brands of regular coffee. These claims, which are true, are scheduled to be the heavy guns in the instant-coffee campaign. Barrington Hall Coffee has already laid down what might be called a preliminary barrage with: "Barrington Hall Instant Coffee is back again to bring you coffee pleasure quickly and without work."

The secondary conflict of advertising claims will be between the two types of soluble coffee: The 100 percent pure coffee ex-

tracts, typified by G. Washington and Barrington Hall coffees, and the "café" or coffee product brands, coffee extract with added carbohydrates (dextrins, maltose, and dextrose), typified by Nescafé and Sol Cafe. Even General Foods Corporation, which put out Maxwell House, Yuban, and other brands for those who want regular coffee, Sanka and Kaffee Hag for those who like decaffeinated coffee, and Postum for those who want no coffee at all, have brought out Instant Maxwell House coffee, which is the "café" or coffee product type. In discussing the new Maxwell House product, a New York Times food editor, inadvertently perhaps, summed up the difference between the soluble products and the real thing in the admission that "the concern does not pretend that it [Instant Maxwell House yields a brew as satisfactory as one correctly made from a high-quality blend of freshly ground beans. . . ."

Soluble coffee is not a war baby. The first soluble coffee was offered to the American public at the Pan-American Exposition in 1901, but up to 1941 the sale of instant coffees was considerably less than one percent of all the coffee consumed in the United States. Some veterans of the A. E. F. in World War I will remember that the G. Washington coffee of that day was a rare treat after the French coffee, poor in quality and overroasted, or the English coffee (which might have been blended from fine Costa Rican beans but which any English cook could make into a beverage that resembled coffee only in appearance), and the stale, already ground, G. I. coffee, which often had to be dug from its bag with a pickaxe and broken up with a ham-

mer before it was boiled-in chlorinated water. G. Washington coffee (and Barrington Hall coffee which started at this time) were, by comparison, flavored with the memory of home. When the returning veteran came back to regular coffee, however, he apparently forgot that flavor, for the instant coffees never captured enough of the market to indicate that they had been so successful overseas that E. F. Holbrook, in charge of the coffee section, subsistence division, U. S. War Department, said that instant coffee "was one of the most important articles of subsistence used by the army."

At the end of World War II, however, with a dozen or so plants, fully equipped, geared to peak-capacity operation for the Armed Forces, the soluble coffees make their bid for public acceptance. That bid can be made with a reasonable degree of confidence, the manufacturers think, because soluble coffee has lowered its price level so that it is now in a competitive position with good brands of regular coffee. Furthermore, war conditions and the much heralded promises of a pushbutton, chromium-plated, begadgeted post-war world have made consumers receptive to new developments and especially to new means to save time and trouble. The extensive use of soluble coffees by American men and women overseas where a hot cup of coffee was a hot cup of comfort whether it tasted like coffee or not will make up for years of promotional activity and word-of-mouth advertising, and there will be a whole new crop of firms adding their tenors and their basses to the insistent publicity chorus. The advertising angles are there, and the soluble coffee people

are well aware of them. An extra advantage is that soluble coffee can be made by the cup. Thus, one or two cups can be made as easily as six or eight, and there is no waste, whereas it is well known that regular coffee is generally better if made in larger quantities. A strictly minor inconvenience of both types of instant coffee is that if they are spilled, they make a sticky mess on drainboard, sink, or table; however, it is a mess that is not difficult to clean up.

The question, then, is: How true, aside from claims of ease and convenience, will the advertising be? How good a cup of coffee will such products provide compared with properly made coffee of the same price class? The plain fact is that there is too little coffee properly made in any price class. and that, by the way, is another point for the instant coffees which are so simple to prepare that it is almost impossible to make them wrong. "There are four principal factors," says Edward Aborn, chairman of the Coffee Brewing committee of the National Coffee Association, "that determine whether a coffee is good, bad or indifferent: (1) flavor (2) aroma (3) strength (4) clarity." How do the soluble coffees measure up in these factors?

respectively. Fine coffee flavor comes from the quality of the beans selected and from the freshness of the product. Not one of seven brands of soluble coffee tested (5 pure coffee extracts and 2 "café" type) was comparable in flavor to well-made, fresh regular coffee. Admittedly all the brands tried tasted a little like the beverage that passes for coffee in many American households, because so little really fresh coffee

reaches the consumer-vacuum-packers' claims to the contrary-and it may be true that, since so many people accept that beverage as coffee, the soluble coffees might be less of a disappointment to many than they are to a good judge of coffee. But since these coffees will be in price competition with the best, they may fairly be rated against high standards; in this they simply do not measure up. Let us say that so far as flavor is concerned, the soluble coffees tested produced something hot and wet but not quite the sort of drink that might set the family to humming, "Oh, what a beautiful morning."

AROMA. Fine coffee aroma derives from the same sources as fine flavor. If you expect, and you should, to get a whiff of the appetizing aroma of fresh regular coffee, newly ground, from the solubles, you will be sadly disappointed, for the soluble variety is as deficient in this factor as in flavor. Even the 100 percent pure coffee extracts have not a full, fine aroma, but, in the original container, smelled rather like stale ground coffee, and in the cup they fared even less well. Those with carbohydrates added had a foreign odor along with the faint coffee smell-not unpleasant, but not coffee.

STRENGTH. Made according to directions on the containers and with the utmost care, none of the solubles produced a coffee as strong as the coffee served by a good restaurant. One of the advantages of all soluble coffees, however, is that the strength of the brew is very easily regulated. A point is to be scored for them on this count, more especially since the strength of each individual cup can be suited to

the taste of each member of a household.

CLARITY. The soluble coffees tested all made clear, clean liquids, as clear as those made from regular coffee prepared in a vacuum coffee-maker or a good urn. They have, furthermore, the virtue of leaving no residue in the cup, making the task of cleaning up relatively easy. Made according to directions, the color of the brew (not an infallible clue to strength but a significant one) varied from the light, almost tea-like color of G. Washington and Barrington Hall to what might be called the chicory-dark hue of Pure Soluble Coffee packed by Coffee Products Corporation.

Thus we see that of Mr. Aborn's four counts, the soluble coffees measure up well on two, but unfortunately the other two, where they do not measure up, flavor and aroma, are unquestionably the really important factors to be considered. If manufacturing methods can be still further improved-and they have shown great advances during the war years-so that a soluble coffee can be produced that will be somewhere near as good as the advertisements will claim, then the big swing of the coffee consumers' business might well be toward the solubles. We must, however, deal with the product as it is, and soluble coffee is not yet ready to supplant coffee as a staple item. It will gain consumers, because it has advertising points that will be skillfully exploited. It will hold some of its gains because of its convenience, because some few will like the beverage even better than they like coffee: because it is well adapted to the small family where only one to three or four cups are required; because it

can be used instead of warmedover coffee for odd-times or can be quickly made for callers; and because it does away with coffee grounds and coffee pot. Soluble coffees will not make friends of those who know and appreciate good coffee and who realize that it is worth while to be put to a little extra effort in order to enjoy the best.

Figures in parentheses give the price per ounce of material in the package.

B. Intermediate

Nescafé (Nestlé's Milk Products, Inc., 155 E. 44 St., New York 17) 4 oz., 32c (8). A pure coffee extract with carbohydrates added. Flavor and aroma, poor and showing decided influence of the added carbohydrates. Clear. Color good. Quality of coffee seemed good, but foreign flavor of carbohydrates was too perceptible.

Sol Cafe (Great Star Soluble Coffee Co., 266 William, New York 7) 4 oz., 29c (71/4). A pure coffee extract with carbohydrates added. Flavor and aroma, poor, but this brand, when made 11/2 times stronger than directed, was the best of all brands tested. Flavor of carbohydrates not perceptible. Clear, and color good when made according to directions. 1

Barrington Hall Quality Coffee (Baker Importing Co., 132 Front St., New York 5) 2½ oz., 52c (20.8). A pure coffee extract. Flavor and aroma, poor. Least clear of brands tested. Color poor when made according to directions.

Borden's Instantly Prepared Coffee (The Borden Co., 350 Madison Ave., New York 17) 2½ oz., 44c (17.6). A pure coffee extract. Flavor and aroma, poor, but second best of brands tested. Clear. Good color when made according to directions.3

Forbes Pure Instant Coffee (Distributed by Jas. H. Forbes Tea & Coffee Co.; mfd. by Forbes Soluble Tea & Coffee Co., St. Louis) 4 oz., 72c (18). A pure coffee extract. Flavor and aroma, poor, but, when made double the recommended strength, was third best of brands tested. Clear. Color good when made according to directions.

G. Washington's Instant Coffee (G. Washington Coffee Refining Co.,

Div., American Home Foods, Inc., Morris Plains, N. J.) 2 oz., 33c (16.5). A pure coffee extract. Flavor and aroma, poor. Clear, but thin and tea-like in strength and color when made according to directions. Would have to be used double strength to suit most tastes.

Pure Soluble Coffee (Coffee Products Corporation, 601 W. 26, New York 1) 2 oz., 32c (16). A pure coffee extract. Flavor and aroma, poorest of brands tested. Clear, but the most likely of brands tested to leave residue in cup unless thoroughly stirred. Color darkest of brands tested.

Off the Editor's Chest

(Continued from page 2)

since most of such units available up until this time in the war and immediate post-war period are not built on a mass production basis, and carry no maker's name or well-known brand, one cannot be entirely certain that several years hence the right parts and service will be available for necessary repairs-even if the store which sells the appliance is an honest and reliable firm with a good reputation in its community. An example of the undesirability of buying appliances from inexperienced manufacturers who have taken advantage of low-cost or haphazard purchases of parts, was reported by the Wall Street Journal not long ago. According to that Journal's account, certain loft operators in New York City have purchased radio parts that have deteriorated in storage and, for that reason, have been disposed of by well-known manufacturers of military radio equipment or radio parts. The sets assembled from such parts, which are among the relatively few that are expected to be ready for consumer purchase around or before Christmas time, may have a life of only a few months before servicing will be required, because of the deteriorated condition of some of their components.

The quality problem is perhaps most significant to the average consumer in its bearing on the

buying of a new automobile, for in making that important family purchase, it may be advisable for careful buyers who cannot afford to take much risk to wait as long as a year, even if that should mean having major repairs made, such as new rear-axle gears installed, a reboring job done or a new engine block put in the present family car. It appears that many of the models of the cars presently on view in the dealers' showrooms are not strictly production-line affairs, but more or less hand-assembled jobs, put together in order that the dealers might have something in the way of exterior finish and form to show and point to in making their first

The labor troubles currently plaguing the industry are also factors of great importance. As CR pointed out in the study of 1938 cars, automobiles made just before and after a period of strikes are often undesirable purchases. for the making of a good car calls for close attention to many points of assembly and inspection and accurate supervision over details of fit and workmanship. where good service facilities are available, even such major and costly repairs as having a new engine block and clutch installed may be more satisfactory than buying one of the first new cars produced, and would provide reli-

able transportation for another year or two, until new cars have been manufactured for a sufficient length of time to get all the "bugs" worked out of them, and out of their production routines that have been set following a long period of work on entirely different kinds of products designed for specialized military uses.

No one can say whether, in a particular case, the consumer should buy or not buy, but in general it may be assumed that in the present state of the market and of production conditions at the factories, the consumer who can say "I'll wait for another year" before making a major purchase will have a better chance of getting his money's worth. That some are in this frame of mind was indicated in the letter to a weekly business journal from a West Coast appliance dealer, who reported that, although he had a window full of new 1942 radio sets, there was no rush to buy them or other new appliances. Consumers, he complained, "have become unusually discriminating and difficult to convince." From what CR has learned of the present state of design and production of new items, it seems they would be wise to continue to hold to this cautious and "show me" point of view when any purchase of major importance or cost is under consideration-at least for several months to come.

Phonograph Needles

HE interest that has been demonstrated in recorded music during the war years is expected to continue and, indeed, to reach new highs in peacetime. It has been estimated that the post-war demand for phonographs will be something like 12 million, as against 5 million now in service. Phonographs, and particularly pick-ups, which are one of the most important factors in transmitting the reproduced sound on the record to the listener's ear with reasonable fidelity, will be subjected to CR's tests as soon as they become widely available again. Since needles as well as pickups are also a vital link in the process of reproducing music, CR has started a series of tests on various types and brands of needles now available and most widely used.

During the past year several articles on phonograph needles have appeared in The American Record Guide, edited by Peter Hugh Reed, 115 Reed Avenue, Pelham 65, N. Y.;

these articles are well worth studying by all who are seriously interested in reproduction of music, especially those who desire to obtain the best possible reproduction with minimum damage to valuable records. One of the writers for The American Record Guide, Gordon Mercer, sound engineer with a wide experience in musical recording and reproduction, has shown that the best choice of needle is necessarily a compromise. Generally speaking, for best reproduction of the grooves cut at the higher frequencies and the larger amplitudes (which represent the louder high notes), a sharply pointed needle having a tip radius of perhaps .002 inch is required. It is true of course that some records are stamped from originals that have been made with a narrow-angled cutter and such records will require a sharper-tipped needle than others, without respect to the pitch or loudness of the tones being reproduced. A needle with a sharp (small radius)

point, however, could (if the wear of the record is to be kept within reasonable limits) be used only with pick-ups having the lightest possible needle pressure: such a needle would have to be changed after each playing. A needle with a somewhat blunter point (having a larger radius of curvature, around .003) is therefore the best compromise, for general use, between the requirements of highfidelity reproduction and minimum wear on the record on which it is played.

The life of the needle will be determined by its material and the shape of the point; a needle with a relatively sharp point (small radius of tip curvature) will naturally exhibit more rapid loss of tip form, due to the higher pressure (stress) per unit area. (This effect is evident in the case of the Recoton needle whose tip profile is shown 3rd from left, where loss of original form with a few playings is much more pronounced than with a needle of blunter tip form, such as the Actone or RCA Victor.) Other factors, such as the weight of the pickup, the length of the needle, and the physical composition of the record being played, are also factors entering into determination of probable needle life.

In the near future, CR hopes



Columbia Chromium mag. 62.5×



mag. 62.5×



mag. 62.5×



RCA Victor mag. 62.5×



was Euroneously stated as 62.5. magnification of the needle points illustrates 22 • CONSUMERS' RESEARCH BULLETIN • DECEMBER, 1945 actual magnification 17:14 40 :46

Comparative Wear Resistance of Various Steel or Chromium Needles

[Note that this wear test was made on the same make of record and the same recording throughout the test. The number of playings permissible under these artificial conditions might be several times greater than when playing records of different makes successively.]

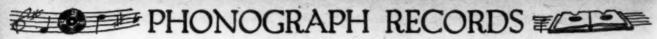
Brand Name	Manufacturer or Distributor	Price	Maker's clain as to number of plays	
RCA Victor Chromium (Green Shank)	RCA Manufacturing Co., Camden, N. J.	6 for 25c	Many	Best resistance to wear of all needles tested; almost no increase in wear from 20 to 50 playings on test rec- ord used. However, loss of fidelity
		-		is reported by one expert on use of this needle for 4 12 inch sides. Other critics would set 10 to 15 sides as the top limit. Individual "chromium"
				needles vary widely in wear resistance due to unevenness in thickness of the hard chromium plating.
Columbia Chromium	Columbia Recording Co., Bridgeport, Conn.	6 for 25c	25	Second best.
Actone Transcription, Type 130M—Red Shank. (Acton's general use needle, for regular commercial records—also for acetate.)	H. W. Acton Co., 370 Seventh Ave., New York 1	100 for 50c	- '	Slight wearing on first play; progressive increase of wear with considerable wear evident at 25 playings. According to experts, this needle is intended to be used for only one side, but no such instruction appears on the package.
Duotone Filter Point	Duotone Co., 799 Broadway, New York 3	12 for 10c	12 to 15	Considerable wear on the first playing; some additional wear on subsequent playings up to 25.
Recoton Phoneedle	Recoton Corp., 178 Prince St., New York 12	30 for 25c		Showed most rapid wear of lot tested; showed considerable wear up to 20 playings. (The Recoton is a
				"sharp" needle, as explained in the text, page 22, columns 2 and 3.)

Gordon Mercer which will discuss in detail various aspects of the needle problem that are important to the critical record user. Later results of the needle- and record-wear tests now under way will also be presented. We present here a preliminary report on the results of wear tests on needles in the steel or chromium group used in an Astatic type L-40-A pick-up giving a needle point pressure of 1¾ ounces, played on

Red Seal Victor records selected for the purpose (American Salute. Gould. Boston Pops Orchestra under Fiedler. Victor 11-8762. \$1).

Comments in the table are based on wear test alone, without any consideration whatever of fidelity of reproduction. (That is a separate question, and the type of needle required for a given record depends upon its make and upon the width of the cutter that produced the

groove in the master record; also to some extent upon the sound effects or degree of convenience desired by the listener. A good many users rate convenience very high and insist upon using needles which do not have to be changed except at infrequent intervals.) Shadowgraphed reproductions of the outlines of the actual needles at different stages are shown for comparison of the shapes and amount of wear of the different brands.



By Walter F. Grueninger

Please Note: Prices quoted do not include taxes. In the ratings AA indicates highly recommended; A, recommended; B, intermediate; C, not recommended.

CONTINUING last month's lists of sets praised this year which I should welcome as Christmas gifts:

Contrasting guitar sets:

- Andres Segovia, Decca Set 384, \$3.50.
- El Flamenco, Asch Set SP100, \$3.50.

Chamber music set:

• Beethoven: Quartet No. 4, Columbia Set 556, \$3.50.

Opera excerpts:

- Wagner: Die Gotterdammerung, Victor Set 978, \$3.50;
 Tristan und Isolde, Columbia Set 573, \$5.50.
- Moussorgsky: Boris Godounoff Excerpts, Victor Set 1000, \$5.50.
- French Operatic Arias, Columbia Set 578, \$4.50.

Other vocal sets:

- Songs and Spirituals, Victor Set 986, \$3.50.
- Villa-Lobos: Serestas, Columbia Set X249, \$2.50.
- Marjorie Lawrence Sings for the Boys, Columbia Set 579, \$3.50.

Light music:

• Song of Norway Selections, Columbia Set 562, \$3.50."

In a class by itself, despite B performance and recording:

• Strictly G.I., Asch Set 455, \$4.50.

ORCHESTRA

Beethoven: Symphony No. 9 (Choral). The Philadelphia Orchestra under Ormandy. 16 sides, Columbia Set 591. \$8.50. Beethoven's last symphony, unique because of its employment of a vocal quartet and chorus in the last movement. Commendable, straightforward performance but not as authoritative as Weingartner's Columbia Set 227. The recording fidelity, however, ranks higher in the new set. Not yet released is the recording made for Victor by Toscanini in Carnegie Hall, October 1945.

Interpretation A

Fidelity of Recording A

Bizet: Music from Carmen. New York City Symphony Orchestra under Stokowski. 8 sides, Victor Set 1002. \$4.50. Immature, exaggerated performance of colorful music. A better orchestra, performance and more realistic recording of the cream of this music is found in the highly recommended Columbia Set X144 (\$2.50). Interpretation C Fidelity of Recording B

Strauss: Death and Transfiguration. New York City Symphony Orchestra under Stokowski. 6 sides, Victor Set 1006. \$3.50. Strauss' third tone poem depicts the struggle of an ill man with death and, finally, the transfiguration of the beyond. This is Stokowski's third recorded reading of the score, the better, heretofore, being Victor Set 217 which need not be replaced by present owners. Neither fidelity of recording of the new set nor interpretation offer marked superiority.

Interpretation B Fidelity of Recording B

INSTRUMENTAL

Chopin: Polonaise in A Flat (Op. 53 No. 6). Petri (piano). 2 sides, Columbia 17377, 75c. Compared to Iturbi's performance on Victor 11-8848 (\$1) Petri plays with less fire and heroics, he is recorded at a lower volume level, surface noise is less pronounced. Both records fall short of glory but Columbia's is 25c cheaper.

Interpretation A Fidelity of Recording A

Debussy: Piano Music. Artur Rubinstein (piano). 6 sides, Victor Set 998. \$3.50. The selections, rather well established in public favor, include Soirée dans Grenade, Hommage & Rameau, Poissons d'or, Refletes dans l'eau, etc. Most of them are played less like Chopin and more like Debussy by other recording artists, notably Gieseking. The recording seems narrow in range and has been overmonitored. High surface noise.

Interpretation B
Fidelity of Recording B

Glazounoff: Chant du Ménestrel & Beethoven: Sonatine. Edmund Kurtz (cello). 2 sides, Victor 11-8815. \$1. Broad, slow numbers which bring out the tone of the cello even though they are of no great musical value. Interpretation AA Fidelity of Recording AA

Rachmaninoff: Prelude in C Sharp Minor & Shostakovich: Three Preludes from Opus 34. William Kapell (piano). 2 sides, Victor 11-8824. \$1. The brilliant young American pianist makes his Victor debut with Russian music which is thrice familiar, in the case of Rachmaninoff, and inconsequential in the case of Shostakovich. Interpretation AA Fidelity of Recording AA

VOCAL

Borodin: Excerpts and Arias from Prince Igor. Soloists, Chorus and Orchestra of the Moscow State Theater. 10 sides, Asch Set 800. \$12.50. Recorded in USSR during an actual performance. Competent vocal performance but the popular orchestral and choral Polovtsian Dances recorded in older Columbia Set X54 more than hold their own. Side one wavers in pitch and exhibits a most peculiar echo a few moments after the opening. Poor tone reproduction with Victor halftone and Recoton steel needles in Audax D38H pickup was improved with sapphire needle in Brush PL20 pickup due, presumably, to more suitable width of needle point to cut of groove. The opening grooves of side three, however, ejected the Brush pickup. The manufacturer claimed the cause of this trouble (probably a groove of insufficient depth) was removed in later pressings. I judge the massive than the new Victor vinylite pressings.

Interpretation A Fidelity of Recording B

Dix: The Trumpeter & Traditional: Were You There. Richard Crooks. (tenor). 2 sides, Victor 11-8814. \$1. The tenor fails to ring the bell in both cases. In Victor's catalogue the spiritual has been far better interpreted by Marian Anderson and by Dorothy Maynor.

Interpretation B
Fidelity of Recording B

Golden Moments of Song. Jan Peerce (tenor). 4 sides, Victor Set SP-8.* \$1.75. Four favorite Italian songs sung at maximum loudness with all high notes held. Yet, this is the way they are usually heard. Included are "O Sole Mio," "La Danza," "Return to Sorrento," "Mattinata."

Interpretation A
Fidelity of Recording AA

Mozart: Marriage of Figaro—Dove Sono & Porgi Amor. Eleanor Steber (soprano). 2 sides, Victor 11-8850. \$1. Despite a few minor criticisms of the orchestra (principally the oboe) a desirable record of two famous, melodious arias sung by one of the best young talents at the Met.

Interpretation A Fidelity of Recording AA Religious Songs. Jeanette MacDonald (soprano). 6 sides, Victor Set 996. \$2.75. Miss MacDonald's admirers are likely to enjoy this album. Included are Agnus Dei, Panis Angelicus, Abide with Me, Nearer My God to Thee, The Holy Cily, etc. Accompaniments by orchestra and chorus. Interprete ion B Fidelity of Recording A

Villa-Lobos: Bachianas Brasileiras No. 5. Bidu Sayao (soprano). 2 sides, Columbia 71670. \$1. Solo voice, eight celli and bass are a unique combination and the plaintive melody they perform will appeal to many. The composer conducts.

Interpretation AA
Fidelity of Recording A

LIGHT, POPULAR, AND MISCELLANEOUS

Berlin: Always & Kern: You are Love. Grace Moore (soprano). 2 sides, Victor 10-1171. 75c. It is a pleasure to hear these old favorites sung so beautifully, though I could do without the sixteen measures of humming in the second chorus of Always.

Interpretation AA Fidelity of Recording AA

Berlin: White Christmas & Nevin: Mighty Lak' a Rose.
Frank Sinatra (crooner). 2 sides, Columbia 36860. 50c.
Only for Sinatra worshippers.
Interpretation C
Fidelity of Recording AA

Berlin: Always & Loesser: Spring Will be A Little Late This Year. Deanna Durbin (soprano). 2 sides, Decca 23397. 75c. Always is badly performed, for excessive liberties taken with the tempo distort the tune. Overside sounds like a poor imitation of Hildegarde.

Interpretation C
Fidelity of Recording A

Eddie Duchin Reminisces. Duchin (piano). 8 sides, Columbia Set C105. \$2.50. No question this pianist has a large following but I find annoying his "expressive" playing in fits and starts and his rapid, uncalled for shifts from piano to forte. Here he performs with unobtrusive rhythm accompaniment one chorus each of such standard popular numbers as April Showers, Till We Meet Again, Alice Blue Gown, It Had to Be You, Am I Blue, Pretty Baby, etc. Audible surfaces.

Interpretation B Fidelity of Recording A

Favorite Melodies from The Hour of Charm. Hour of Charm All Girl Orchestra and Choir under Phil Spitalny. 8 sides, Columbia Set C-108. \$2.50. Movie palace arrangements, predominantly vocal and in very bad taste, of "Battle Hymn of the Republic," "Lord's Prayer," "Rosary," "National Emblem March," "Ave Maria," etc. By concert standards the performers measure up to their ungrateful task only reasonably well.

Fidelity of Recording A

Flamenco. Cavlos Montoya (guitar). 6 sides, Asch Set SP100.

\$3.50. "Flamenco" is a type of sentimental gypsy music related to Arab music. The six numbers recorded present playing of the highest order.

Interpretation AA

Fidelity of Recording AA

Gallop-Rose: Holiday for Strings & Porter: Drip, Drip, Drip, Spike Jones and His City Slickers. 2 sides, Victor 20-1733. 50c. The boys, in top form in their satire of Holiday for Strings, go dull overside.

Interpretation A Fidelity of Recording A

Gershwin: Porgy and Bess. Philharmonic Orchestra of Los Angeles under Wallenstein. 4 sides, Decca Set 397. \$2.50. Badly recorded performance of the symphonic arrangement by Russell Bennett. Interpretation AA Fidelity of Recording C

Her bert: Italian Street Song & Summer Serenade. Jeanette MacDonald (soprano). 2 sides, Victor 10-1134. 75c. The gay street song is a GI favorite. Overside, an arrangement of the lively orchestral number, "Badinage." Miss MacDonald's fans will buy this record despite the fact that I vote against her musicianship, her small, pinched, forced voice and the thin sounds of the accompanying orchestra. Interpretation B Fidelity of Recording B

Hot Jazz by Lionel Hampton (vibraphone). 8 sides, Victor Se. HJ-3. \$4. Recorded in 1937 and 1938. Rather primitive and monotonous is this small orchestra. Included are "China Stomp," "Stompology," "Shoe Shiners Drag," "Buzzin' Round with The Bee," etc. Nearly all instrumental.

Interpretation B Fidelity of Recording B

James P. Johnson (piano) and four supporting instrumentalists. 6 sides, Asch Set 551. \$5. Album of New York jazz of uneven quality. Specialty numbers not known and probably never played twice in the same way. Fidelity of recording poor for 1945.

Fidelity of Recording C

Kostelanetz Conducts. Andre Kostelanetz and His Orchestra. 8 sides, Columbia Set 574. \$4.50. Suave arrangements of long-lived popular numbers. The musicians play expertly what is set before them. Included are "Stardust," "Blues in the Night," "St. Louis Blues," "Manhattan Serenade," "Stormy Weather," etc.

Interpretation AA Fidelity of Recording A

McCarthy-Monaco: You Forgotcha Guitar & Tobias-Simon:
No Can Do. Xavier Cugat and His Waldorf Astoria Orchestra.
2 sides, Columbia 36836. 50c. American rhumbas with choruses sung with a smile by Leah Ray. Rhythmic, subdued, pleasant.

Interpretation AA
Fidelity of Recording AA

Mercer-Raskin: Theme from Laura & Tansman: Scherzo from Flesh and Fantasy. Janssen Symphony Orchestra of Los Angeles under Werner Janssen. 2 sides, Victor 11-8808. \$1. The Laura offering comes under the heading of musical doodling and the overside motion picture piece is little more rewarding.

Interpretation A Fidelity of Recording B

On the Moon-Beam. Vaughn Monroe and His Orchestra. 10 sides, Victor Set P142. \$3. Vaughn Monroe sings a chorus on each of these sides concerned with the moon and thereby hangs the weakness. Included are "Moonlight and Roses," "Paper Moon," "Moonglow," "Moon of Manakoora," etc.

Interpretation B Fidelity of Recording AA

Roberts-Fisher: Tired & Fifteen Years. Pearl Bailey (vocalist). 2 sides, Columbia 36837. 50c. Specialty songs you may hear in a night club—one a "blues," the other a lively number revealing hill-billy influence. Sung and spoken with real style.

Interpretation AA
Fidelity of Recording AA

Rodgers: Carousel. Original New York cast. 10 sides, Decca Set 400. \$5.50. The popular musical now on Broadway. Show atmosphere in this set. The composer has done more exciting work though "June Is Bustin' Out All Over" is a corking good tune.

Interpretation AA Fidelity of Recording A

Schwartz: You and the Night and the Music & Youmans: Time on My Hands, You in My Arms. Nan Merriman (mezzo-soprano). 2 sides, Victor 11-8813. \$1. These tuneful songs, which seem to stand the test of time, have been sung with a trifle less edge to the voice. Interpretation A Fidelity of Recording AA

Songs of Devotion. Fred Waring Glee Club and Orchestra. 10 sides, Decca Set 393. \$3. Less hocus-pocus here than in Favorite Melodies from The Hour of Charm but still the arrangements are more elaborate than I like. The male choral group tops male and female soloists. Included are "Now the Day is Over," "Nobody Knows the Trouble," "Faith of Our Fathers," "Onward, Christian Soldiers," "Battle Hymn of the Republic," etc. Recording lacks clarity, surfaces are noisy, Interpretation B Fidelity of Recording B

Household Cleaning

** Preparations **

B. P. I. Steel Wool Paste (Bryant Products, Inc., Brooklyn, New York; 12 oz. for 25c), intended to be used in the cleaning of aluminum, stainless steel, tin, brass, and enamel, was found on analysis to consist of sodium oleate (a kind of soap), 6%; light mineral oil, 1%; sodium carbonate (washing soda), 1%; powdered pumice (containing an appreciable proportion of fairly coarse grains of gritty abrasive), 58%; very finely divided iron filings, 2.3%; water, 32%.

This product is considered rather too abrasive for use on aluminum, and the presence of a strong alkali such as sodium carbonate is undesirable for a product intended for cleaning aluminumware. (Pumice is not a satisfactory abrasive for use on enamelware except for careful and occasional use in removing coatings or encrustations that do not yield to milder methods.)

Vollrath Nu Steel Liquid (The Vollrath Co., Cleaner Sheboygan, Wis.; 49c for 12 oz.) is a brownish liquid of thick creamy consistency designed to be used for the cleaning of cooking utensils, and particularly for stainless steel and "porcelain enameled ware." On analysis Nu Steel Liquid Cleaner was found to consist of the powdered abrasive tripoli (which is a good and mild abrasive much used for metal polishing) colored with some iron oxide pigment, and made into

a thick paste with water and triethanolamine soap. (For the characteristics of triethanolamine and its soap, see discussion under Maid of Honor Venetian Blind Cleaner. Tripoli is an abrasive derived from the natural leaching of rock, and is used in metal polishes, buffing compounds, and scouring powders. Trial of the material on stainless steel and aluminum showed that it scratched, but not as much as the 4-in-1 cleaner, next reported. It is considered that Nu Steel Cleaner would be fairly satisfactory for use as recommended in its directions (provided you can read them: unfortunately, as with a number of other chemical household products that have been tested recently, the directions on Nu Steel Cleaner were printed in such fine and poor type as to be almost unreadable without a magnifying glass).

4-in-1 All Purpose Cleaner (Vapoo Products Co., Inc., 347 Madison Ave., New York City; 25c for 12 oz.) is intended to be used for cleaning painted walls, woodwork, and linoleum; polishing brass, aluminum and chromium; stainless steel and copper; removing rust, etc. It was found on analysis to consist of considerable tripoli with some starch and soap, borax and water. When this material was used as directed on stainless steel, and aluminumware, noticeable scratches were produced. The abrasive in 4in-1 was too coarse-grained for

use on highly polished metalware. (Tripoli, however, when sufficiently finely ground, is a very satisfactory abrasive for metal polishing.)

Maid of Honor Venetian Blind Cleaner is a product which according to its label is sold only by Sears, Roebuck & Co. Upon analysis, it was found to be an emulsion of a light mineral oil, water, and triethanolamine soap. The purpose of the oil is presumably to help soften and remove dirt of an oily nature. A slight oily film left on the finished surface would also tend to give it a fresher appearance immediately after cleansing, though there is a disadvantage in such a film in that dirt and dust are likely to attach themselves to the surface more quickly, subsequently. Triethanolamine soap is a kind of soap that is made by the reaction of a fatty acid with triethanolamine a liquid with an ammonia-like odor, which also has important uses as a wetting and emulsifying agent. It is considered that a triethanolamine soap has good detergent properties and should be free from danger of injury to the paint or enamel of the blind; these soaps have the . characteristic of being close to chemically neutral; on this account they have even found use in various cosmetic preparations. (The possibility, exists, however, that the residual soap left on the painted surface after cleaning might affect the paint coating after a long period of time; risk of injury to paint can be avoided by sponging the surface after the cleaning process, with a cloth wet in clean warm water. The maker's label would be improved, were he to advise this in his directions.)

Ratings of Motion Pictures

THIS section aims to give critical consumers a digest of opinion from a wide range of motion picture reviews, including the motion picture trade picture reviews, including the motion picture trade to digest of opinion from a wide range of motion picture trade to digest of opinion from a wide range of motion digest of opinion from a wide range of motion digest of opinion from a wide range of motion digest of opinion from a wid	
digest of opinion from a wide range of motion 5 5 6 Corn Is Green, The	
picture reviews, including the motion picture trade - 2 1 Corpus Christi Bandits	cri-mel A
10 6 Country Attack	anas AVC
	cri-mel AYC
different periodicals in all. The motion picture — 5 4 Crime Doctor's Courage, T	hemys-dr A
ratings which follow thus do not represent the - 3 3 Crime Doctor's Warning, T	hemys-dr A
The state of the s	Cri-mys A
and year of the control of the contr	hist-de A
— — Dear Octopus (See Randolt	h Family)
dicate the number of critics who have been judged 1 11 4 Diamond Horseshoe	mus-com-c A
to rate the film A (recommended), B (intermediate), - 7 8 Dillinger	cri-mel A
-1 C (-st -ssss-f-1) - 3 7 Divorce	dr A
J DOCAS OF NEW TOTAL	
Audience suitability is indicated by "A" for — 8 1 Dolly Sisters	
addits, I for young people (14-10), and C for	
children, at the end of each line.	
Descriptive abbreviations are as follows: - 6 7 Earl Carroll Vanities	mus-com A
— 4 5 Fasy to Look At	mus-com AYC
biog—biography c—in color (Technicolor or Cine- mus—musical hist—founded on historical incident mus—musical 3 6 5 Enchanted Cottage, The 5 1 Enchanted Forest, The	dr A
e-in color (Technicolor or Cine-mus-musical — 5 1 Enchanted Forest, The	fan-c AYC
color) (Technicolor or Cine- mus—musical mys—mystery car—cartoon com—comedy mov—dramatization of a novel com—comedy mov—dramatization of a novel com—comedy mov—dramatization of a novel com—comedy mov—formance 2 10 Escape in the Desert	
com—comedy rom—romance — 3 4 Escape in the Desert	
	mus-com A
dr—drama war—dealing with the lives of people	
— 4 0 Falcon in San Francisco	cri-mys A
A R C 1 1 6 Fall of Berlin	
- 5 4 Abbott and Costello - 1 5 Fashion Model	
in Hollywood, mus-com AYC — 5 Fatal Witness, The	cri-mel A
- 3 7 Adventures of Rusty	
- 12 5 Affairs of Susan, The	mus-mel A
* 0 Anchore Amelah	
— 9 2 And Then There Were Nonecri-mys A — 5 3 Follow That Woman	
	mys-mel A
- 5 2 Arson Squad cri-mel AYC	
- 4 6 G. I. Honeymoon	war-com A
- 11 4 Back to Bataan	ones AVC
- 1 3 Barge-Keeper's Daughter, Thecom A - 1 2 Gangster's Den	mus-com AYC
4 7 Beautiful Cheat, The mus-com A 6 8 George White's Scandals	mus-com A
- 5 8 Bedside Manner	war-dr A
- 2 3 Behind City Lights	mel AYC
6 7 2 Bell for Adano, A	mus-mel A
	com A
- 5 10 Bewitched	
- 1 2 Blazing the Western Trailmus-wes AYC - 2 3 Half-Way House, The	fan A
3 8 3 Blithe Spirit	oy rom AYC
— 2 6 Blonde from Brooklynmus-com A — 10 6 Hidden Eye, The	cri-mys AYC
— 2 6 Blonde from Brooklynmus-com A — 10 6 Hidden Eye, The	
— 9 Blonde Ransommus-com A — 3 7 High Powered	mus-com AYC
- 9 Blonde Ransom	
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	10	3	John Dillinger (See Dillinger) Johnny Angelmys-mel A		2	1 4	Shady Lady mus-dr A Shanghai Cobra, The cri-mys A
	2		Jungle Captive		2	2	She Went to the Races
2	12			-	6	4	Silver Fleet, The
4	14	1	Junior Miss	1	0	3	Sing Your Way Homemus-com A
	- 5	10	Keep Your Powder Drywar-dr A	. 2	5	7	Son of Lassiewar-mel-c AYC
	1	4		_			Song for Miss Julie, Amus-com A
-	-	-	Kid Sister, The		2	. 5	
1	12		Kiss and Tell	_	-	3	Song of Old Wyomingmus-wes-c AYC
-	4	1	Kittydr A	-	7	10	Song of the Sarong, Themus-adv A
	2		Ladu Confessor The mi and 1	1		4	Southerner, Thesoc-dr A
	2	6	Lady Confesses, The	_	8	-	Spanish Mainadv-c A
-	-	8	Lady on a Train mys-com A	_	2	3	Spell of Amy Nugent, The mel A
largered.	3		Last Hill, Thewar-dr A	-	3	4	Spider, The
6	7 8	3	Leave It to Blondie	_	1	2	Springtime in Texasmus-wes AYC
0	-	2	Life and Death of Col. Blimp war-dr-c A	-		4	Stagecoach Outlawswes AYC
1	5	1 3	Lone Texas Ranger, The mus-wes AYC	4		1	State Fair
	-	8	Lost Weekend, The	1	4		
- 2	1		Love, Honor and Goodbye	6	10	1	Story of G. I. Joewar-dr AYC
2	11	4	Love Letterswar-dr A	-	_	_	Strange Affair of Uncle Harry
	2	7	Mama Lavas Dana		2	2	(See Uncle Harry)
	3	7 5	Mama Loves Papa	-	2	3	Strange Confession
-		-	Man Alive	_	1	2	Strange Holidaywar-dr A
-	8	-	Man from Oklahoma mus-wes AYC	_	6	2	Strange Illusion
-	1	. 6	Man Who Walked Alonewar-com A	*	1	2	Stranger from Santa Fewes AYC
-	3	3	Marked Trailswes AYC	-	6	8	Sudanmus-mel-c A
2	13		Medal for Benny, A	-	5	1	Sunbonnet Suemus-dr AYC
-	4	8	Men in Her Diarycom A	_	4	1	Sunset in El Doradomus-wes AYC
2	7	5	Mildred Piercedr A	_	-	9	Swing Out, Sister
-	2	3	Military Secretwar-mel A	_	3	6	Swingin' On a Rainbow mus-com A
-	1	6	Missing Corpse, The				
_	13	2	Molly and Me	_	2	- 6	Tahiti Nightsmus-com A
-	3	2	Muggs Rides Again mel AYC	_	5	6	Tarzan and Amazonsadv AYC
-	7	7	Murder, He Says		4	3	Tell It to a Star
				-	2	8	Ten Cents a Dance
-	6	9	Naughty Nineties, The mus-com AYC	_	5	3	That Night With Youmus-com A
-	- 3	-	Navajo Trail, Thewes AYC	1	8	-	That's the Spiritmus-fan A
_	7	7	Nob Hillmus-dr-c A	_	1	4	There Goes Kellymus-com AYC
				_	2	3	They Came to a Cityfan A
-	5	4	On Stage Everybodymus-com AYC	_	8	8	Those Endearing Young Charms.war-rom A
_	3	6	One Exciting Night	1	12	1	Thousand And One Nights, A.mus-fan-c AYC
2	11	-	Our Vines Have Tender Grapesdr AYC	-	_	3	Three in the Saddlemus-wes AYC
1	12	3	Out of This Worldmus-com A	-	2	4	Three's a Crowd
-	-	4	Outlaws of the Rockies wes AYC	2	10	- 4	Thrill of a Romancemus-com-c A
_	11	4	Over 21	_	2	1	Trail of Kit Carson wes AYC
				_	-	3	Trouble Chasers
1	8	7	Pan-Americanamus-com A	6	4	_	True Glory, Thewar-doc A
1	5	-	Pardon My Past	_	8	3	Twice Blessed Com A
_	7	4	Paris Undergroundwar-mel A	-	3	7	Two O'clock Couragecri-mel A
1	9	3	Patrick the Great				
_	1	9	Penthouse Rhythmmus-com A	_	11	5	Uncle Harry A
Control of the last of the las	4	2	People Are Funnymus-com AYC	-	6	9	Unseen, Themys-mel A
_	2	4	Phantom of 42nd St., The cri-mel A	_	2	1	Ural Front, Thewar-dr A
_	5	3	Phantom Speaks, Themys-mel A	_	5	3	Utahmus-wes AYC
_	8	9	Picture of Dorian Gray, Thedr A				
-	8	7	Pillow to Postwar-com A	3	10	1	Valley of Decision, Thedr A
-	2	7	Power of the Whistler mys-mel A	_	1	8	Vampire's Ghost, Themys-mel A
2	11	2	Pride of the Marineswar-dr A				
				-	2	7	Wait for Mewar-dr A
_	3	9	Radio Stars on Parademus-com AYC	-	4	4	Wanderer of the Wasteland wes AYC
-	5	5	Randolph Family, The	2	10	1	Way Ahead, Thewar-dr A
_	2	1	Return of the Durango Kid, The. mus-wes AYC	_	2	3	We Accusewar-doc A
8	3	5	Rhapsody in Bluemus-biog AYC	2	10	4	Weekend at the Waldorfmus-com A
-	-	5	Rhythm Round-Upmus-wes AYC	. 1	13-	1	Where Do We Go from Here?mus-fan-c A
_	2	7	River Gang	-	1	5	White Pongomel AYC
_	2	4	Road to Alcatraz cri-mvs AYC		3	5	Why Girls Leave Homemus-mel A
-	-	5	Rockin' in the Rockies mus-wes AYC	Debende	2	2	Wildfire wes-c AYC
_	1	9	Rough, Tough, and Readywar-com A		4	6	Within These Wallssoc-dr A
1	10	7	Royal Scandal, A	-	12-	2	Without Love rom A
_	1	4	Rustlers of the Badlandsmus-wes AYC	_	9	4	Woman in Green, The mys-mel AYC
_		_	Rusty (See Adventures of)	3	12	1	Wonder Man, The mus-com-c A
						_	
-	5	10	Salome, Where She Danced mus-dr-c A	_	2	3	Yolanda and the Thief mus-com-c A
1	9	7	Salty O'Rourke mel A		10	4	You Came Alongwar-mus-dr AYC
-	3	1	Sante Fe Saddlemateswes AYC	-	2	2	You Can't Do Without Love mus-mys AYC
-	_	7	Scared Stiffmys-com AYC	_	_	3	Youth Aflamedr A
-	3	4	Scarlet Clue, The	_	4	.5	Youth on Trialdr A
-	3	2	Scotland Yard Investigatormys A				
-	4	10	See My Lawyermus-com AYC	2	- 3	_	Ziegfield Follies mus-com-c A
-	1	5	Senorita from the West mus-rom AYC	_	1	9	Zombies on Broadway
-	3	2	Shadow of Terror	_	_	8	Zoyawar-dr A

The Consumers' Observation Post

[Continued from page 4]

you believe, if a Cornell University survey is representative. Housewives queried expressed a preference for a flat top on which to put food when both hands were needed to remove other articles from the refrigerator. Other suggested improvements were better facilities for holding ice cream, butter, and frozen desserts, a door latch that could be manipulated with arm or elbow when both hands were full, additional provisions for tall milk bottles, and either larger meat compartments or elimination of such compartments altogether.

DREAMS OF NOVEL HOUSEHOLD EQUIPMENT of the future continue to provide entertaining speculation for magazine writers. One of the more practical items of this type appeared in Business Week a few months ago, which suggested that the closet of the future will include a shelf of wide-mouthed glass jars ranging in capacity from 1 to 5 gallons in which woolen gloves, sweaters, furs, and similar items can be sealed against the encroachment of moths. This idea has merit. If the jars can be fastened so that they cannot slide off and break, they will represent an improvement over the present transparent closet-shelf boxes of various compositions that weaken and disintegrate in time.

FLUORESCENT LIGHTING has gained wide popularity in the last year or two, and is destined to have greatly increased use after the war. As to the effect of this type of lighting on the eyes, a recent brief summary issued by the Section on Ophthalmology of the American Medical Association and the American Academy of Ophthalmology and Otolaryngology indicates that there is no known harmful effect of fluorescent lighting upon vision, and that fluorescent lightm should not cause eyestrain if properly installed and used. The Section on Ophthalmology comments that the light is closer to daylight in color than light from tungsten-filament lamps, and that this is a desirable characteristic. Glare is sometimes a problem, but this is a factor with any system of lighting that must be dealt with in all larger installations by qualified illumination

This is the Christmas to give Consumers' Research Bulletin to friends— to yourself too!

WITH new brands, new products, products with familiar names manufactured by new firms making their appearance, consumers need all the help they can get in order to purchase wisely.

Each month Consumers' Research Bulletin provides a guide to the market by reporting results of tests of commodities available and presenting news of current developments in the field of consumers' goods. Then there is the 200-page 1945-46 Annual Cumulative Bulletin which summarizes a wide range of CR's previous findings together with much new material in the fields of food, household appliances, heating equipment, textiles and clothing, home maintenance and repair, cosmetics and toilet articles.

On the next page you will find a convenient order blank. Use it today!

engineers. Undesirable effects with fluorescent lighting may result from either insufficient light or excessive light. Flicker is sometimes a problem but is largely eliminated in the best fluorescent lamp installations. CR considers that fluorescent lamps and accessories are as yet a long way from being fool-proof or trouble-proof and a good deal of research and development remains to be done to make fluorescent lighting as steady and dependable as illumination by the "old reliable" incandescent lamps. As to economy, fluorescent units are sometimes a little cheaper to use, when all costs are allowed for than incandescent lamps; sometimes the cost will be about the same, depending upon costs of the units themselves and of electric current.

NEW PRODUCTS: O'Cedar Furniture Touch Up Polish, which is sold at 10c for 3 fl. oz., is a combustible mixture of mineral oil and naphtha with color adda cover odor is present. This polish is also advertised for woodwork and wood floors, and is claimed to revive dull and damaged wood surfaces, and to conceal scratches without discoloring the surrounding finish. (Directions state that it is not to be used on very light-colored woods.) When first used, this product covers the scratches well and leaves a nice appearing finish; however, after a few days the surface becomes duller than parts not touched by the polish, probably due to the presence of the oil in the product. However, it was judged a fairly satisfactory means of improving the places marked by small scratches.

Whiz Self Polishing Floor Wax (R. M. Hollingshead Corp., Camden, N. J.) is intended for "linoleum, rubber, asphalt base, terrazzo and all wood floors either varnished or painted." An analysis of this product recently received indicates the following approximate composition: Carnauba wax, 4.5%; 6.3%; fatty acids, 1.5%; borax, 0.2%; triethanolamine, 0.5%; the of about 87% being water. A dipentene cover odor was also present. the remainder

X-Acto Jr. Modelling Knife, 25 cents, with one blade might prove to be a useful tool in the home for other purposes than modelling and for jobs for which the razor-blade type of knife is not suitable because of its bluntended form. X-Acto Jr. consists of a stiff pointed reversible blade which provides for two rather short cutting edges; the blade is held by a special interlocking device in a sheet-metal handle shaped to fit the hand as the knife would be held in modelling or whittling. Extra blades are available from the manufacturer, X-Acto Cresent Products Co., 440 Fourth Ave., New York 16, at 25 cents for a package of five. X-Acto's handle is not fully satisfactory nor comfortable to hold and the slot in the blade did not correctly fit the bladeholding element in the sample CR purchased, so that there was danger of breaking the blade or cutting oneself when removing it for insertion of a new one. Thus the manufacturer has a bit of improving to do before his 25-cent X-Acto can be considered fully ready for the market.

CR-12-45

Consumers' Research, Inc. Washington, N. J.

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100-Octane Fuel and Your Car

Some car owners have found to their sorrow that the 100-octane gasoline, which they have heard was among the numerous improved items that would be available post-war, does not agree with the digestive system of their automobiles. Neither will it agree with that of the new 1946 cars, and it may be some years before fuel of such high octane rating can be used, even if available.

Access to supplies of 100octane fuel has made it possible for some car owners working in airplane engine and other plants to "try it out" in their cars, with the expectation that performance would be improved and smoother engine operation would be obtained. It was soon discovered, however, that the engines with which this high octane fuel was used showed evidences of overheating, such as burned valves, plus difficulties resulting from the lead content of the fuel (about which CR has previously presented information in its discussion of tetraethyl gasoline). Contrary to expectations, performance was no better than normal, even

with spark setting advanced as much as the usual regulator or "octane selector" permits.

Only those drivers who were content to use 100-octane fuel as a blending agent found its use beneficial. By mixing this fuel with the poorer grade (low octane) fuels available during the war, a very satisfactory anti-knock gasoline was produced. It seems that mixing the high octane fuel with naphtha provided for some a means of extending car operation when gasoline coupons ran short. (Naphtha mixed with the low octane fuel available during the war was also used, but the low octane rating of the naphtha made this combination a noisy affair, as did the use of kerosene. Low octane rating corresponds to high tendency to produce knocking in an engine running slowly and pulling hard.)

All this goes back to the simple engineering fundamental about which CR has given factual data in the past, namely that compression pressure, as determined (in automobiles, but not in supercharged air-

plane engines) largely by the compression ratio, determines the degree of anti-knock quality of the fuel required. To use a higher rated fuel than necessary is nothing more than a waste of money, or it may even, as in the cases noted above, render unsuitable otherwise satisfactory engine parts; for even with automobiles having the higher compression ratios (around 7 to 1), sufficient spark advance to compensate for the different rate of burning of the fuel is not easily obtained. It is to be doubted too that, even if the contact breaker cam is set ahead, the fuel can be economically and safely utilized. With few exceptions (if any) the post-war regular grade of fuel is all that need be used in a "clean" engine. And when carbon accumulations increase the compression pressure. only enough ethyl gasoline need be used (by mixing in a suitable amount in the fuel tank when purchasing) to prevent knocking when accelerating from normal driving speeds or when running under near-openthrottle conditions.

Correction Notes

(Continued from page 8)

October 1944 as reported in the October 1945 Bulletin, prices for this product were found over the wide range of \$4.95 to \$6.95, possibly because a price change had just been put into effect by the manufacturers. (Some retailers are more careful than others in reflecting current market changes in their selling prices.) As a rule, however, prices on these items fall in a very close range; for example, on October 18, 1945, the price of a bottle of 100 Dayamin tablets in 13 different stores in one metropolitan area was reported as falling in the narrow range of \$4.86 to \$4.95.

Exposure Computer Col. 336 ACB '44 -'45 and Page 25, Col. 2

April '45

Silverware Cleaners and Polishes Page 19, Col. 3 May '45

Change address of American Standards Association from 29 W. 39th St. to 70 E, 45th St., New York 17, New York.

The address of the Norma Chemical Co. (see second listing under A. Recommended) has been changed from Stevens Ave. and Wilson Place, Mt. Vernon, N.Y., to 29 W. Grand St., Mt. Vernon, N.Y.

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